

As a cader you have the chance to train at the Academy.

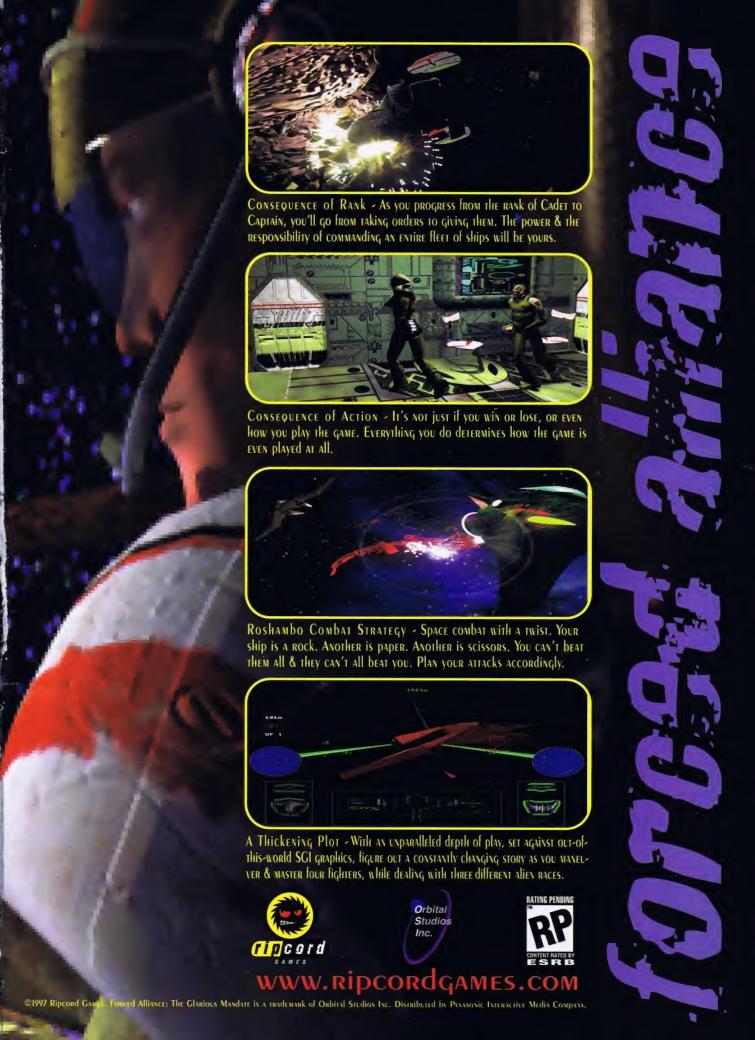
As a pilot you have the chance to battle hostile enemies.

As a captain you have the chance to establish an alliance with aliens you don't really trust in order to save the universe.

Obviously, this is not a game of chance.

The Great Intergalactic War has left the Galaxy in chaos. And a steadily increasing barrage of attacks on human ships leaves you with only one choice. You must set out on a series of covert missions to defeat the enemy. Everything you do, every enemy you kill or let get away, every decision you make will have an effect on the ever-changing plot.

For PC CD-ROM. Available late September. To purchase Forced Alliance visit your local software retailer, or call 1-888-797-5867. Downloadable demo available at www.ripcordgames.com



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FEATURES



Panzer General II

Achtung! The best seguel to come along in a millennium. Dyed-in-the-wool PG players rejoice! You will no longer have to feel that

> "War is hell," while getting the job done. Far too much in store for that, as Ed Dille's article attests.

Star Trek

More brilliant gameplay for Star Trek aficionados. Assume the role of your favorite character in any of the six new puzzle-based episodes. Intrigue, sabotage, and murder abound in Karen Jones's blockbuster preview.



Flying Nightmares

Sure, there've been updates before but none equal what FN2 has in store. Super sim and then some. Byran Walker tells what it was like putting this baby together.

E3 Roundup

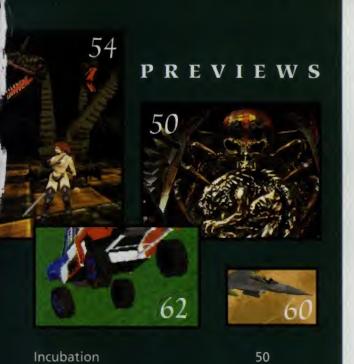
Ed Dille spreads the word on the miracles and blasphemy that took place when this year's Gamers Pilgrimage reached Atlanta for E3. 22

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Bound to become the top-dog of real-time strategy gaming, TA pulls off the impossible — it breathes new life into a weary genre. Kudos to Cavedog a rebirth! Cigars all around.... Zack Meston reports on this reason to celebrate



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DEATH is NOTHING

Play as one of 4 death-dealing Mageslayers across dozens of hellish levels.

Death would be too easy.

thousand year old debt

Too quick to satisty the hunger of one you betraved and left to the ravages of the Mages

Before LORE THANE extracts his terrible price on your body and SOUL, you are bound to wander through five worlds of atrocity.

Stoking your powers. Solving internal mysteries.

Fighting your way through FEAR into MADNESS for one last, desperate struggle against Evil, himself.

No. Death would be too easy.

in another millennium.

Gathering Magic and arcane knowledge.

Only then will be anoint VOLI with the last sacraments of your forment.

An all-powerful war chest of magical attacks like Chain Lightning and the Firewhip.

Soul-destroying 3-D

environments heaving with diabolical traps and mysteries.

Spread the Evil with several modes of MultiSlayer action for up to 16 players.



Windows 95





CGE

CD-ROM

WE'VE GOT SOME great full version games for you this month. Climb on board the disc and you'll find not one but three full versions of games. This time out, our full games are Legend Entertainment's Death Gate, Mission Studios' Jetfighter II and the original Zork from Activision. We've also packed the disc full of playable demos. You get all this at no extra charge, with your purchase of this issue.

GETTING ROLLING WITH WINDOWS 95
System Requirements for Menu

- 60 MHz Pentium
- 8 megabytes of RAM
- 16-bit sound card
- 4 megabytes hard disk space
- VGA card
- Getting to the Main Menu
- Insert the disc in your CD-ROM drive.
- Wait for Autoplay to engage. If it doesn't after a couple minutes, pull up Run from your Start menu, type "<CD-ROM drive>:\cge95.exe," and click on OK to enter.

NAVIGATION

- At the first screen, you'll see our disclaimer. Read it, and if you agree to its terms, click on the I Agree button to get to the main menu.
- At the main menu, you'll see a brief description of this month's games. If you want to load them, click on the Complete Game tab at the top of the menu interface. If you'd rather get to the demos or upgrades/patches, click on Demos instead. (Of course, if you really want to make us happy, click on the Subscription tab and subscribe to CGE today!)
- At each of the submenu screens, click on the appropriate button to install whichever game, demo, upgrade or patch you want.

ROLLING WITH WINDOWS 3.x

Sorry, but our menuing system only works under Windows 95. If you've got Windows 3.x, or if for some reason our menu and your Win 95 computer don't get along, you can manually install the games, demos and upgrades/ patches by following these simple steps:

- In the File Menu, type in the letter of your CD-ROM drive. Go to the folder you want, double-click to open it, then look the *Readme* file. Double-click on it to open, and read what it tells you to do.
- At the Program Manager, pull down Run from the File menu. Type in the letter of your CD-ROM drive, then click on the Browse button. Find the appropriate folder, double click to open, then double-click on the installation file (usually setup.exe or install.exe).
- Click on OK to start installing the game!

If you experience insurmountable difficulties with our CD-ROM or menu system, you may request help by e-mailing us at mail@cgentertainment.com. If you experience difficulties with the games or demos themselves, please check the publisher's Website for help.

NOTE TO WINDOWS 95 USERS:

Although we try to ensure that DOS-only games will run under Win 95, we cannot always guarantee that these programs will run successfully. MS-DOS games sometimes experience memory problems or other errors while running under Windows 95. We recommend that you make a full boot disk to run these games (consult your Windows 95 manual for details).

FREE DEMOS







FREE GAMES





DEATH GATE is a fantasy adventure based on the *Death Gate* novels by Tracy Hickman and Margaret Weis. The *Death Gate* novels and game are about the relationships between five different races of people.

The story begins with the magical Sartan race feeling so threatened by their rivals, the magical Patryns, that they magically sunder the world. The Patryns are trapped in a fatally dangerous place known as "The Labyrinth." The rest of the world is divided, as in the scene above, into four realms on which the "mench" races live. The mench are comprised of elves, humans and dwarves. These races are generally nonmagical and are settled on one of the four realms of fire, air, water or earth. Playing this game will encourage you to read Hickman and Weis's Death Gate novels.

REQUIREMENTS:

386 or above computer; 4MB RAM; CD-ROM drive. VGA graphics adapter or above. This game has been tested to run under Windows 95 and shouldn't have any problems. However, if you do encounter problems, please make a boot disk in order to run this game properly.

ZORK: THE GREAT UNDERGROUND EMPIRE features an unnamed adventurer who enters a white house (no, not that White House!) and discovers a trapdoor leading to the underground empire of Zork. There, the adventurer's quest is to collect 20 different treasures, place them in their trophy cases and collect a map. This game, originally designed by MIT students in the late 1970s, was released by Infocom back in 1981. This is the complete game, posted by Activision (which now owns the rights to the Infocom text adventures).

REQUIREMENTS:

This text-based game will run fine either under DOS or Win 95. Just run the compressed executable in any directory you want to install it into, sit back and enjoy a real old-time text adventure classic.

JETFIGHTER II is not only a flight simulator, but a complex action/adventure that contains a strategy game as well. If you are new to flight simulations, then you should begin by studying the manual supplied on the disc first. The *Jetfighter* series has been a success for Mission Studios — *Jetfighter III* is currently on sale.

REQUIREMENTS:

286 or above computer; 640K RAM (on some versions of DOS, 512K may be sufficient); CD-ROM drive; VGA graphics adapter and compatible monitor. We also recommend that you use: Microsoft compatible mouse, or joystick and game adapter card.





X-Wing vs. TIE Fighter

Published by LucasArts www.lucasarts.com System Requirements: Pentium 90, 16 MB RAM, SVGA, joystick, mouse, sound card, Windows 95

Imperialism

Published by SSI www.ssionline.com System Requirements: Pentium 90, 16 MB RAM, SVGA card w/1MB video RAM, mouse, sound card, Windows 95

Pacific General

Published by SSI System Requirements: Pentium 90, 8 MB RAM, mouse, Windows 95

Dark Colony

Published by SSI System Requirements: Pentium 60, 8 MB RAM, SVGA card w/1MB video RAM, mouse, sound card, Windows 95

Triple Play 98

Published by Electronic Arts www.ea.com System Requirements: Pentium 90, 16 MB RAM, SVGA card w/1MB video RAM, sound card, Windows 95, DirectX v3.0a

Machine Hunter

Published by MGM Interactive www.mgm.com System Requirements: Pentium 60, 8 MB RAM, sound card, Windows 95

Fallout

Published by Interplay Productions www.interplay.com System Requirements: Pentium 90, 16 MB RAM, mouse, Windows 95



Editorial

Soft Packs

comes along.... It's taken two years or more, but it's been worth the wait. I'm sure that Bullfrog has popped the champagne cork to celebrate this event. I wish there were more top-quality games

like this one! Well done, guys. You've come up with a classic.

On a different note: I'm a big *Diablo* fan, and just recently I came across an add-on pack I'd never heard of before. It looked like a good quality product; the sales pitch on the pack certainly seem intriguing. And so I bought it straight-

away. Eagerly I rushed home and loaded the disk — nothing! There was nothing on it but some useless html players' guide and a shareware backup program. I felt cheated?! Huh!

I've been seeing too many of these unofficial, so-called "add-on packs" of late, and I'm sorry to say that the vast majority of them make great instant frisbees and nothing more. Hey! I threw mine out of the window into the trash can — perfect shot... or maybe it possessed some sort of hidden intelligence (more likely, homing

instinct).

On a more positive note: I've heard that we can expect more official packs, as software houses try to exend the life of their merchandise. These add-on packs often take a lot of time to develop and market. You can bet that they offer better value than any of these "get-rich-quick" packs, which piggyback on the success of the games.

Finally, on a happy note: This month's meaty ("no fluff," says Ed Dille) feature is on the *Panzer General II* from SSI. Meaty as well are: *Flying Nightmare* — a development summary written by Bryan Walker at Eidos; *Star Trek* — the inside story of the latest news on what's coming for trekkers; and, finally, all the latest previews and reviews. So what are

you doing, hanging around here for? Get with the reading — right now. That's an order.

o many great games, like *Dungeon Keeper*, have been coming out in recent months that I keep thinking it must be the holidays — the time when most of the top games appear on the market. I remember running an interview with Bullfrog about *Dungeon Keeper* way back in January 1996...then we waited and waited. It seemed that it would never arrive. But now, finally, it's here, and it's selling like hot cakes.



Games as great as this don't often get realized as planned. Software houses, pressured by unrealistic deadlines, often make unrealistic demands on game developers. Development teams rush to meet software houses' deadlines for scheduled on-sale dates. (Missing one during the holiday season is a retailer's delight, for they charge the software houses more in rush service for placing the product.) Where am I going with all this, I hear you say. Well, every once in a while a game like *Dungeon Keeper*

Happy reading

Philip Roward

Philip Paisnel



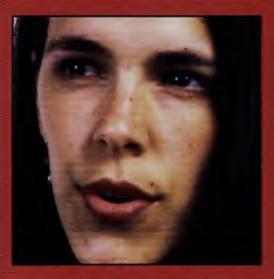




PARADISE LOST...









Henrietta Emerson

Age: 64 Retired

Former charity worker and treasurer of the Wives of Foreign War Veterans. Killed tragically during anti-videogame violence protest rally.

Ronald Wanker

Age: 52

Mental Health Technician

Employed at Paradise Psychiatric Center for 27 years. Fatally wounded by multiple bullet wounds.

Jennie Peters

Age: 17

Paradise High Senior

Majorette in local youth marching band, Death caused by 3rd degree burns inflicted by exploding napalm,





"Antisocial, psychotic, and completely irresistible."

"It's ploodier than Monolith's BLOOD," and more explosive than id's QUAKE™!"

"One of the most powerful game editors we've ever seen in an action game."

"Sure, senseless violence is fun. But it's even more fun when it's directed at marching bands."



PARADISE







AND THEY THOUGHT YOU WERE SUCH A NICE, QUIET BOY.

Welcome to Paradise ... Arizona. They're out to get you. (or are they?)

Conspiracy or Insanity? It doesn't matter, you don't have time to think, only time to kill. GO POSTAL!!

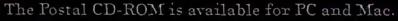
Blast, maim and fire-bomb your way through 17 unsuspecting locales. But don't get too crazy out here-strategy is key, so take advantage of the third-person "premeditated" perspective that lets you see exactly who's cold and who's still able to pull a trigger.



- Brutal shooter strategy combo challenges you to keep one eye on your target and the other looking over your shoulder at all times.
- Real-time 3D characters rage against beautifully hand-paintd killing fields.
- So freakin real, your victims will actually beg for mercy and scream for their lives!
- Multi-player network play over modem, LAN, or the Internetyou can go Postal with up to 15 other death row candidates.
- Mass murder opportunities: spray protesters, mow down marching bands and char-broil whole towns.
- Complete Game Editor included No bull, this is the one we used to create the game. Create and manipulate characters, actions and personalities.



The Green Every Curror Would And No. Only Ties Day 2T - 5Tak



Get them first at your local retailer, www.gopostal.com or by calling 1-888-797-5867 and give them the code: Death Row











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TOTAL ANNIHILATION

PRESENT 1 CTC 15

CAPTAIN'S LOG: STARDATE: 48623.4.

ON A RECENT MISSION TO EARTH,

OUR AWAY TEAM HAS ENCOUNTERED

SEVERAL LETTERS DATING BACK

TO A PRIOR ISSUE. OUR INVES-

TIGATION LISTS THESE

HISTORIC FINDS:

CGE welcomes all

and any comments from its readers. Please address your correspondence to: Computer Game Entertainment, Letters Dept., 100 West 32nd Street, 6th floor. New York NY 1000l Owing to space limitations, the editors may find it necessary, in some cases, to shorten the correspondence received.

Choosy

I would like to say that I was surprised to find a magazine that would put a complete game on their CD, and I think that you would outrank the other magazines (subscribers-wise) if you did that every month or so. Most people don't like demos because of the restrictions, but if you throw one in that doesn't hold people back then you have a good thing. I bought the premiere issue at a Publix in Newnan, GA. I brought it home, opened the magazine read and liked most of the articles, went to my room with the CD and played Shannara. I liked it because it was a game that had an understandable plot and it was "cheap with a challenge" ("cheap" meaning affordable). Basically this

is a request for more registered games in the future. May your new magazine grow to stupendous heights and bring gamers the joy of no restrictions.

Chris Finley

Then you'll be delighted to hear that that's what we plan to keep doing! Coming up on next month's CD-ROM is a full version of Dream Web from Empire Interactive.

Plight of the RAMless

I purchased the premiere issue of your magazine and... I found it to be tasteful, thoughtfully laid out, full of excellent reviews and interesting columns and editorials. There, how's that for compliments?

I wish you great success in future issues.

Of course everyone has to be a critic so I'm not going to be any different. The only thing I would like to see different is an little eyecatching display of the system requirements that the games being reviewed need. I liked the way the reviews were laid out and rated, but (there's always a but!) for some of us poor folk who don't have

P200 MMX's with 128 MB of RAM, we'd like to know if it is even feasible to dream about playing the game. Just a thought!

Thanks for the great magazine!

Sincerely, Michael Sicheri

Canada

Listing the system requirements is an excellent idea, Michael — we're looking into it for future issues.

No Role

Do you have any idea what CRPG stands for? Computer Role Playing Game. Check out the Role Playing part. Role Playing involves character development, NPC

interaction, etc. *Diablo* has little or none of any of that. Don't get me wrong, I love *Diablo*. I think it's a great action game. Yes, I said action game. That's what it is. It is no more a role playing game than *Crusader*—

No Remorse. They both have the same amount of NPC interaction, the same pretty graphics, and cool sounds. The only difference is that Diablo has swords while Crusader has guns.

- Insanity

"CRGP?" — I mean "CRPG." Thanks for the education.



Thousands of eyes are watching your every move. The next one could be your last.

You step off the plane in Turkey and are thrown into a murderous conspiracy. Decipher the clues. Solve the mystery. Or pay with your life.

www.planetexplorer.com



Journey into a corrupt world that stretches from the ancient past to worlds of virtual reality.



Delve into 6 CDs featuring 45 minutes of exotic video shot on location in Turkey.

Receive a \$10 rebate in the mail when you buy this game.



Immerse yourself in 360° photographic environments that bring Istanbul to life.







Available on Windows 95.



United Connection Travel Planning Software is included in every game. Purchase a United flight online by April 30, 1998, and receive a \$25 Travel Certificate on your next United flight of \$200 or more. Some restrictions may apply.

Received

Howdy doody, I am Chris, and I wanted to congratulate you people on a wonderful mag, that *Shannara* full version was an extreme idea. I just wanted to say you guys need to put more hints, cheats, and tips in you mag or something like that anyway.

See, as I (a very good gamer) see it, people who are newbies, or just not good at gaming need some sort of "help" which is, of course, cheats. Who wants to spend forever looking around on the Internet for that "cheat for my not-so-new game." I personally think you people should have cheats and what-nots for the new and sorta old games — not like C64 old but like 1993 and up, starting from the *DOOM* era to now. Well, I'm sure you guys and gals are sick of my input so I shall say good-bye...and if you ever need a cheat, just e-mail me!

Oh yeah, would you extremely busy people please take time to just e-mail me back, I don't care if you say "You're a wierdo, don't e-mail us again." I just want to know you

received my e-mail.

Your Mag Reader, Chris

Dear Chris: Thank you for your kind words! As for your comments about Hints & Tips, we are working to expand our section. While it'll mostly cover recent games, we might also cover hint & tips for "classic" (read: early '90s)

games as a regular feature.

Reply to our letter:

Hi, CGE Me (Chris O'Neil) again, and I want to thank you for responding to my letter. You guys and gals have the BEST computer game mag around! I sent a letter to "PC Gamer" a week ago and still haven't got a response. I just wanted you to know you guys are great!!!

> Your Trustworthy Mag Reader, Chris O'Neil

Freaked

I love your mag, its very well written the reviews are great. I'm ready to subscribe, but there's one problem. My CD doesn't work right. I was going to spend \$60 to buy *Shannara*, then I saw your CD with the game on it. I freaked. I bought it, sped home & slipped it in. I installed *Shannara* but the CD just kept on reading itself, so I kept on getting the disclaimer. When trying to play the game, the CD is unreadable. It's not dirty, and I know what I'm doing.

Mark Kucharik

While we do our best to make sure our CD-ROMs work properly, occasionally a bad one slips through. If you've gotten a nonfunctioning CD-ROM from us, send it back to us and we'll ship you a replacement disc.

Nice Rebutt

Hello: I'm the PR manager at Total Entertainment Network (TEN), and just read the first issue of your magazine — it's great. I particularly appreciated the opportunity for rebuttals by the games' developers/publishers. What a cool idea. As a PR person that really appeals.

Gath Chateau, TEN

Future Subscriber

After flipping through your premiere issue, it took me back to how [another magazine] was when I first started reviewing for them in 1990. You have lots of content.... I especially like the way the ads are kept out of the review section. So often it is so blatant when an ad is on the facing page of a review.

Your mission statement that is outlined in "Let the Games Begin" is noble and I hope you can stick to it. Based on this issue, I will be sending in a subscription soon to put my support behind you. The review of *G-Nome* was dead on the money. I enjoyed the "Counterpoint" piece. I wonder how long it will take the others to copy this idea. Thanks for having the balls to step away from the status quo and try something new. I wish you more success.

Stan Trevena

We're so glad to hear so many of you enjoy our "Counterpoint" pieces. We tell our writers to give their honest opinon, but we are aware that one gamer's heaven is another's hell.

True Confessions

I have to admit that the only reason I bought your magazine was because your CD was the only one with a full version game on it. I have started to play *Shannara* and I love it. Your magazine was great, too. I especially like the interviews and the rebuttals.... Keep up the great work!

Chris

Dropped PC

Your magazine is indeed very good. Good writing, in-depth detail on games (including background information, detailed specifications on the game itself, etc. etc.). I absolutely loved your information nugget on the upcoming 688 and F-22 games.

One minor quibble. Aren't your reviews a little bit on the high side? The lowest score I saw for a game is about 45 for *G-Nome*, but the rest were in the high 80s to low 90s (after averaging). I understand that each and everyone has a different opinion on games, but still, that sort of caught my attention. Still the reviews were in depth, showing that the reviewer at least played through a bit of the game before reviewing it....

Now, the best part about the magazine — the ad to article ratio is great!!!!! I did not find an ad for every two or three pages of the magazine! it was more like an ad to every 5 or 6 pages (I might be a bit off here). What a refreshing change from[another magazine]! I was completely amazed....

A very fine piece of work! And as long as the quality of your writing doesn't drop, you can be sure I'll do my bit to let others know about your magazine! Already, I'm dropping my subscription to [another magazine]....

Thank you for bringing to us this wonderful new magazine. and please...please do not succumb to the dark side of over-advertising and lousy writing!!!

Regarding the number of games with high marks in our first issue, that's part of the growing pains of a magazine. Because we were just getting started, a number of our writers reviewed only those new games they liked.



You've Just Been Gored By A Triceratops.

There Are Two Choices.

Evolve Or Die.

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Play through 360 million years where life evolves at 30,000 years per second.



Challenge up to 5 other opponents as you play across the whole planet.

Receive a \$10 rebate in the mail when you buy this game.



Control more than 160 creatures as continents collide and break apart.







Available on Windows® 95.



United Connection® Travel Planning Software is included in every game. Purchase a United flight online by April 30, 1998, and receive a \$25 Travel Certificate on your next United flight of \$200 or more. Some restrictions may apply.

October

Douglas Adams Aboard the *Starship Titanic*

BESTSELLING AUTHOR DOUGLAS ADAMS (The Hitchhikers Guide to the Galaxy) is no stranger to "multimedia" Having guided Hitchhiker through phenomenal successes in radio, television, publishing, and a text-based computer game, Adams is now gearing up for the maiden voyage of his newest sciencefiction epic, Starship Titanic, an original "intergalactic 3D adventure" "CD-ROM" game available in October 1997

Titanic, a joint effort by Simon & Schuster Interactive and Adams new company, The Digital Village, has been, according to Adams, "my full and total activity for the last year. I've been working five days a week with the development team because I love this kind of thing." After the 1985 Hitchhiker computer game, which has sold over 350,000 copies, Adams waited until the arrival of MYST, and the new era of computer graphics it ushered in, before revisiting the garning genre full force.

After researching numerous adventure games, Adams felt that he could up the ante on existing storylines and interactivity. "The one thing everyone was sort of missing out on was real engagement between the user and the game. If you want to talk to characters, there's a list of options for stuff you can say, I mean, real life works like that?" he scoffs playfully. His criteria for Titanic was to create a beautiful environment with an original, immersive story, and "use that environment to do something really compelling, which is to allow the player to converse with the characters...to go out and rescue and develop that technology which enables you to talk to the machine.

The result is a language engine where interaction with characters is made possible by Veloci-Text, a parcer language tool developed by Virtus Corporation. As revolutionary as the language technology may be, speech recognition is not part of Titanic. Adams admits that in two or three years' time that may be the norm, but for now players will communicate by typing, and the games characters, called "bots" (short for — you guessed it — "robots"), have a prerecorded vocabulary of over 5.00 words and will talk back to the player.

The game begins as the keel of the mysterious Starship Titanic collides with your living room. You are then invited aboard the immense craft, which is populated by traumatized robots and an unhinged parrot — obviously signs that something has gone terribly wrong. Once on board, the starship goes into hyperspace, and the fun begins as you try to unravel the mystery behind the failure of her maiden voyage. Communication and negotiation with the "bots is essential while progressing from deck to deck, solving increasing more difficult puzzles, trying to repair the ship's intelligence and, hopefully, returning to Earth.

In addition to Titanic, Adams is clearly looking forward to what The Digital Village can bring to interactive entertainment. Formed as an online company primarily, he considers his role to "create new entities

in the traditional media because that's what drives attention to the online world." Any media projects including CD-ROMs, movies, television, books or, he adds, "whatever I want to turn my ital. That's just fine with Adams, who experiences "intellectually fascinating."

what would come of the marriage. Spectrum Holobyte had become the Michael Cimino of electronic publishing, never delivering on time and always coming in over budget. Although MicroProse's product line had a stronger reputation, the company was still reeling from the split between founder Sid Meier (who was showing Gettysburg in the Electronic Arts back

room at the show) and "Wild Bill" Stealy (who is

MicroProse

Matures MICROPROSE

PERHAPS THE BEST NEWS of the show had more to do

with some of the best people who make the

games, rather than the games themselves. All

too often, corporate mergers and acquisitions

take the life out of the companies involved, but

once in a while a plan comes together. When Spectrum Holobyte acquired MicroProse last

year and called the collective entity Micro-

Prose, there was a lot of speculation about

doing quite well with his new company, Interactive Magic). Loads of good people remained in the trenches of both development studios, on their own for the first time outside the legendary shadows of Sid, Bill and Spectrum founder Gilman Louie. But when the Press openly questioned the survival of the new MicroProse in the absence of that leadership, the guys and gals who had really made these industry leaders' visions into reality even began to question themselves. But they didn't knuckle under,

ADAMS they knuckled down. Veteran producers Joe Scirica of Maxis and Amy Smith Boylan of Acclaim came forward to head the West and East Coast studios, respectively. Each of them is quick to point out that s/he knows where the rubber meets the road, and the impressive line-up put forward at E3 was their troops' doing, not theirs. Back-patting aside, the fact remains that the new MicroProse is stronger than either of the original companies ever were, even in their glory days.

- Ed Dille



DMA Target: Acquired

NOT ON THE HEELS of their purchase of Imagitech last year, Gremlin Interactive has announced a new acquisition: DMA Design. Best known internationally for its *Lemmings* titles, DMA will be allowed to continue as a semi-autonomous company. Its managing director, David Jones, is to join Gremlin's board of directors as creative director.

All parties are very excited about the acquisition and promise great things, including five original, high-quality titles per year. Certainly the addition of DMA means an added depth of expertise in Nintendo 64 products for Gremlin. According to Gremlin's chairman Ian Stewart, the deal "creates what I believe to be the most exciting software company in

Europe and a true world-player." Gremlin Interactive is now positioned across the board as a major player with interactive softwares for computer and console systems. Let's hope we don't have too long to wait to see what the company's newest brainchild looks like!

Never let it be said that a Software needs to work on sharing stills the developer has announced that it expered into technology licenses to their usily tormed Quake engine with six lucky third-party developers. The new licensess will be able to put id's technology toward their own 3D game design strategies for carbot interactions and world physics, game interface animations, player control and that gamer Grail, multiplayer gaming, id's side of the deal is the license fees, which are projected to bring in \$5 million over the next two years. "Developing the world's hottest titles will always be the primary focus of id, but technology licensing will represent a significant secondary source of revenue for some time to come," promised id CEO Todd Hollenshead.

Achieving Psygnosis

HERE IT 88, folks, for holiday shopping and beyond — two more goodies from Psygnosis, not just for PC but also for PlayStation. They have action enough to sate the most movement-maddened technogeek — and all in CD-ROM for Windows 95 and PlayStation:

G Police: Here we have an explosive flight shooter set in the nasty cities of the future, where the gamer patrols the skies as

a cop in a majorly high-tech air-support gunship whee!This 3D game features 35 missions, Full Motion Video sequences, interactive audio in

Gremlin

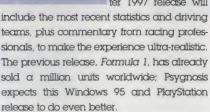


the form of radio contact with headquarters, a major weapons selection and an array of multicamera views. The plot is strictly no-holds-barred, set in motion by murder, sabotage and corporate espionage, with mid-air shootouts enough to satisfy any kill-crazy gamer.

Bad guys are everywhere, on the ground and in the air, so keep your eyes open and your weapons on. Look for this one in the 4th quarter 1997.

Formula 1 '97: Here's a banquet of goodies for the Speed Racers among our readers, a

racing sim with random weather conditions, racing physics, driving and pit stop strategy and more than 14 world-famous tracks. This 3rd quarter 1997 release will



See the July issue of CGE for more end. '97, beginning-'98 releases from Psygnosis: Psybadek, Shadow Master, Overboard, Rascal and Respect Inc, or head for Psygnosis's Web site at www.psygnosis.com.



Under Construction

BUCKLE YOUR SEAT BELT: Activision has announced it will be taking the party to the streets with its fall issue of Interstate '77, an extension of characters and situations from its popular Interstate '76. In this Windows 95 PC 3D title, players will be protecting illegal gas runners as they try to get fuel to a U.S. gray market. Their opposition — a vigilante border patrol run by a crazed Vietnam vet who wants to start World War III. Activision promises improved sight and sound, a Save Game feature and enhanced frame rate, new music and, best of all, additional cars and more weapons. As icing on the cake, the game will feature full multiplayer capability.





Monster Sound



DAM NO MULTIMEDIA'S MONSTER SOUND PCI-based audio accelerator is available at retail. Thanks to A3D Interactive audio from Aureal Semiconductor (developed for NASA virtual reality simulators), gamers and Internet surfers can vastly improve their PC sound capability. While Monster Sound provides multistream positional 3D audio for true-life sound, Diamond's audio accelerator enables quad-speaker output, which can turn a computer into a thundering PC sound machine. Monster Sound also works with leading VRMI. Internet audio software. Included in the deal are complete versions of the hottest new computer games.

Monster Sound features Window 95 plug-and-play installation and co-exists with ISA-bus audio components that are already in the PC, allowing users to play all the latest games. Contact Diamond at their Website: www.diamondmm.com.



Head-to-Head with Sierra

NEW FROM SERRA — multiplayer strategy titles from its Impressions Division. Among them, Civil War Generals II, in which players manage and maintain morale and supplies for the troops as they march on to victory. (Particularly noteworthy are its multimedia film footage and original artwork.) Due out in October.

Another title, *Lords of Magic*, combines the excitement of real-time combat and the depth of resource management with a turn-based campaign. Wizards, warriors, thieves and other assorted creatures abound. Magic spells play a big role here. Due in November.

Captives promises to be the biggest surprise of the lineup. It's a real-time game of strategy, fast action and humor. Perilous terrain must be navigated, aliens driven back and humans rescued from a hostile environment. Over 20 missions take place in a detailed world that features real-world physics in a multilayered 3D environment. Captives is scheduled to be on shelves in November.

Brace Yourself for *Quake II*

It's Monster Payback time in Quake II, where improved and complex mean nasties with superior resistance to damage hunt down the hapless player, all in 3D. That's the promise made by id Software, creators of the previous versions, QUAKE Mission Pack No. 1. Scourge of Almageddon and QUAKE Mission Pack No. 2. Dissiplution of Eternity. id promises the games players a army of smart, belligerent enemies that inhabit a variety of interrelated worlds, with enough variety to satisfy the most jaded gamer. If the local bad guys aren't enough, the game also is multiplayer-capable.

In addition to challenging monsters, interactive environments and complex effects, id also promises gamers a unified engine. This will integrate 3D ahip sets. Windows 95/NT and Internet components that were previously separate Quake elements. The promise of this unified engine is for more sophisticated AI and speed.

Quake II, like the previous Quake games and the forthcoming Hexen II, will be distributed worldwide by Activision. For more information, contact them at their Website, www.activision.com.

Die Hard with Bruce Willis in *Apocalypse*

MAJOR STARS INVADE the gaming industry! Action heavyweight Bruce Willis, best known for blasting his way through three Die Hard movies, is ready to rock the gaming arena in Apocalypse, an action/adventure title published by Activision and available for the Sony



PlayStation later this winter. Players will team up with Willis's character to battle evil forces in a futuristic setting and prevent the destruction of humanity as we know it. Just another day for your average action hero — but as always, the proving ground for gamers will be in the gameplay, not the hype.

At an E3 press conference promoting Apocalypse, Willis, who did most of his acting for this title in a motion capture suit, called the experience "a lot of fun." He joked, "Acting really isn't that difficult, it's just lying well." Though he was obviously being playful and, at times, testy with the gaming press, he did offer insight into what may be possible with motion capture technology, which is not full motion video, but a digital rendering of an actor's facial and body movements. "Eventually, they're going to be able to have the technology to capture all the young actors at the age of 25, so when an actor becomes 80 he can still play someone 25. I hope I get on the cutting edge before I get too damn old."

When asked how he would feel about playing Apocalypse, which would mean joining forces with his own avatar, Willis, who is an avid gamer, replied, "Well, it's really going to suck if I get killed right away." Amen, Brunol — Karen Jones

Beboputer Aloo Bop!

A "NAMEN" FOR ANYONE FROM 14 TO SG, Bebop BYTES Back, with its 860 pages and dazzling visuals (including hundreds of 3D graphics), shows how and why computers function the way they do. Even for the jaded, this blockbuster publication will hold many surprises. Not only does it introduce computer fundamentals, but it goes on



to describe the design of a simple microcomputer in such a thorough and fascinating way that the reader will be hard-pressed to put it down.

Accompanying this innovative book is *Beboputer Virtual Computer*, an Internet-ready CD-ROM. To be used with Windows 95, the *Beboputer* has been furnished with a selection of useful tools, super virtual import and output devices and lots more. In addition to featuring step-by-step labs that include 3D animations and archive video from IBM, the *Beboputer* possesses more than 200 megabytes of multimedia content. This one-of-kind product is from Maxfield & Montrose Interactive. For more information, contact their Website: ro.com/~bebopbb.

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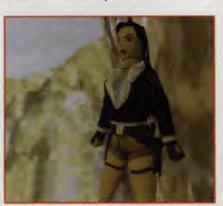
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IF YOU WORK

in any business long enough, it's fairly easy to become jaded and cynical. When any of us in the old guard of Electronic Entertainment journalism bump into one another at E3, almost the first question that gets asked is, "What have you seen that's hot?" Most of the time, the answers are less than inspiring. Sure, there are good games, and we talk about those and exchange gossip about who left what company and why, but it's been years since most of us have bounced around a show floor really fired up about what we've seen. This year was different; and even a poorly run pressroom, insanely unorganized media materials, atrocious scheduling, blistering weather and a show floor so spread out that getting anywhere on time was virtually impossible couldn't defeat our enthusiasm. Things were changing, new ground was being broken and, most important of all, people were finally seeing the big picture and not just the bottom line.

The most significant trend of the show was the complete dominance of online multiplayer gaming. If a title didn't offer this feature, it simply wasn't taken seriously. Not all of the publishers got it but the vast majority of them did, and the remainder will come up to speed or die of obsolescence. Game designers and programmers are gamers, too, and they have known for years what publishers have resisted: we would rather play each other than the best Al any of them could come



NOT JUST ANOTHER PRETTY FACE

up with. That's why game developers previously demanded and established LAN connectivity as a standard design feature when there was absolutely no commercially viable reason to do so — only 5% or so of the audience had access to a LAN. (Of course, the developers fell inside that group — hmmm....)

The second most significant trend was clear and distinct shifts away from console



based video gaming as the "core" of the industry. With very few exceptions (Sega, Nintendo, Capcom and Konami being the major ones), publishers had far more PC

titles in development than
console titles. But even
Sega had chinks in its
console armor. Segasoft's biggest announcement of the show was Heat.net, a
PC based multiplayer online gaming service slated to launch this

BY ED DILLE

fall. Perhaps the ISDA reports showing an installed base of 5.8 million third generation console users (N64, Sega Saturn and Sony PlayStation combined) compared to 22 million multimedia PC owners in the U.S. alone are starting to sink in. Those console owners need not worry about availability of new games, because those are still forthcoming, but most third party publishers, even old videogame standbys like Acclaim and THQ, now view console titles as ancillary revenue streams and not their bread and butter. Also, you can expect Nintendo, Sony and Sega to continue to support their hardware systems for some time to come just to try and recoup their developmental investments, if nothing else.

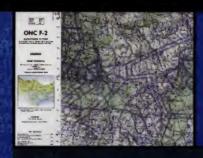
A third trend is the start of a major movement toward DVD as a publishing media for games, movies, music and everything else digital. Diamond threw its hat in the ring with a \$599 CD-ROM upgrade kit that has stereo and TV out jacks. These jacks allow the DVD player in your computer to double as a DVD movie player for your home entertainment system. Diamond looks to be the best DVD entry so far, or at least the smartest. Although there are a lot of companies supporting DVD conversions of their games, the most significant indicator that DVD will become

Directive) only

the standard comes from Access, who will publish its next Tex Murphy adventure (Mean Streets, Under a Killing Moon, The Pandora

on DVD. Access
doesn't do a lot of games, but they are always on the cutting edge (Mean Streets was the first game to use Full Motion Video, for example), and so far they have never been wrong about where everyone will eventually go (they just get

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there first).

The push toward 3D accelerated graphics boards is reaching full swing as well. The first games that flat-out require them are

hitting shelves now, and soon you won't play anything new unless you go ahead and upgrade to the new boards. Players may complain, but the simple fact of the matter is that co-processing is the solution to many programmer nightmares. You can do a lot more in a game design when you can count on the

sound card processor to handle its load, the graphics processor to handle its load and free the main CPU to crunch all the really good stuff. If you still resist reaching into your pocket once again after that explanation, wait until you see how good these games look. You'll become a believer.

The companies that fielded the most impressive lineups at the show overall were Electronic Arts, Interplay and Micro-Prose. Interestingly, all of these companies were also showing the best stuff for next year in private showings behind closed doors. Industry paranoia is rampant again; everyone has been ripped off more than once, and companies are guarding their trade secrets a lot more closely as a result. We were specifically prohibited from releasing some of the things we saw in these meetings, but suffice to say that these companies are headed in the right long-term direction. As for what we can talk about, let's get to some highlights on the games you've been waiting for, broken out by genre.

ACTION/ARCADE & ACTION STRATEGY GAMES

As one might expect, the Action play field was crowded with *Quake* and *Mechwarrior* derivatives and sequels. Arcade titles seemed on the whole to be next generation renditions of the same old stuff, but originality won the day in both genres. *Sin*, developed by Ritual Entertainment for Activision, was the clear favorite in the action/shooter category because it broke new ground for the genre as a whole (see this issue's "Action" column for more details).

The best buzz for an arcade title went to *Postal*, produced by upstart developer Running With Scissors for Ripcord Games. (The attitude in these companies' names should tell you something — they are willing to take chances to do something new and fresh.) Postal is the most wonderfully politically incorrect title to come along in years. Your trailer is being repossessed, you're unemployed and your prospects are bleak. Why not become a delusional psychopath to occupy your spare time? Up to 16 players can go head-to-head roaming the streets of Everytown, USA from a three-quarter top-down perspective, taking out each other and whoever else gets in the way — including the local marching band. Veteran Vince Desi of Running With Scissors rightfully calls it, "the Pulp Fiction of computer games," and judging from the lines of people waiting to play at E3, it should enjoy equal success.

There were the requisite number of sequels on hand, including *Quake 2* coming from Activision (that's right, id is not involved), *Hexen 2, Mechwarrior 3, Interstate 77* and so forth. But the heavily hyped *Daikatana*, John Romero's first from his new company Ion Storm, didn't shine in



the Eidos booth next to Tomb Raider 2. Face it, gang — everyone loves Lara Croft and will anxiously follow her short shorts through another 15 levels! Finally, it looks like Heavy Gear from Activision might have a chance at being the Mechwarrior killer they've hoped for ever since Micro-Prose became the publisher for Battletech (with FASA developing). The word on the street is that FASA is having its share of problems morphing from paper to electronic publishing and that Mechwarrior 3 probably won't be out until next year. By then, it might not matter.

Die by the Sword from Interplay deserves special mention because this Action combat game features a physics-based engine that the designer used to obtain his Ph.D. in physics from Berkley University. The game uses absolutely no motion capture technology, but everything moves so smoothly and realistically that you can hardly believe it. Everything is physics-based — even the way human joints move is based on the real world model. If the player character gets jerked in the air upside down by a rope trap, the arc that they swing in is affected by their movements, including attempts to hit attacking creatures and the impact of creatures hitting them. You can also switch between first and third person perspective at will. It's just amazing to witness, and more amazing to play in a game environment that feels this real!

Die by the Sword features 11 levels, 30 character types, 4-player multiplayer capability, a quest mode and a melee mode which is basically arena-based gladiator type fighting. The overall flavor of the game is medieval fantasy, and Braveheart fans will find their share of dismemberment and gore. Best of all, players will be able to script their own special moves and execute them with a single macro key. That ought to make head-to-head play awful fun!

ADVENTURE/ROLE-PLAYING GAMES

One of the long-term anomalies about the games industry is that often the best licenses produce the worst games. There have been exceptions, of course, but it is also true that no one has really done the Star Trek license justice yet. Interplay's Starfleet Academy, which is about to release, comes the closest of anything so far, but their next product may well blow

even that out of the water. Star
Trek: Secret of Vulcan Fury features the most amazing graphics
of any adventure game we've
ever seen, looking like a
cross between Toy
Story and the old
Thunderbirds television series,

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and eclipsing even those of Westwood's long-awaited *Blade Runner* (though the latter will be coming out first). Interplay has also shown their wisdom by enlisting

D.C. Fontana, veteran writer of the original series, to script six entirely new episodes for the game. Although non-Trekkers may not know it, the Romulan Empire grew from a sect that split off from Vulcan long before the timeframe of the original episodes series. The Fontana has written will explore some of the secrets and intrigue which caused this schism. As such, most fans will enjoy them for their contribution to the history of Star Trek if for nothing else. But it appears there will be many more reasons to like the game than that. All of the cast is back to reprise their roles — thanks to the beauty of computer animation, we need not see how they have aged in the last 30 years.

The clear winner in the RPG category is Ultima Online. The Britannia of Ultima Online is vast, encompassing a volume of about three football fields of game screens. If a player started at the western coast of the land and walked straight to the eastern coast without pausing to interact with anything, it would take eight to 10 hours of real time, depending on how far north or south the player was when he or she started the journey. Other elements of the game constantly evolve — a functioning virtual ecology drives monsters to roam in search of food if it's scarce, and world events are interrelated through a

closed economic system and limited resources. Grass grows, rabbits eat the grass, wolves eat the rabbits and so forth. An incredibly complex series of Al routines





where events continue to transpire even while players are away, so that there is always something new when one returns.

Players choose from a multitude of professions, including seemingly mundane occupations like farmer, blacksmith or merchant, or more adventurous callings like thief, warrior, mage and so forth. But these should only be considered starting points for a life in Britannia and not ends unto themselves. To survive, players must eat, clothe themselves and find shelter. The manner in which one chooses to do so is completely self-determined. For example, players can raise their own sheep, guard the flock against predators, sheer the wool, spin cloth and dye it to make garments of their own design, then use these themselves or barter with other players to obtain items they need. It's just like the real world in that players are free to make their own way and determine their destiny. But since this is also a world of magic, monsters and a vast struggle between the forces of good (lead by Lord British) and the forces of evil (lead by Blackthorne), things are never boring.

Other stand-out products in these genres included Jagged Alliance II from Sirtech, Blade Runner from Westwood Studios (finally coming out this fall), Dungeon Keeper just released from Bullfrog and Fallout from Interplay. The latter is noteworthy because it is the long-awaited follow-up to Wasteland, the most successful post-apocalyptic RPG ever made. We also have very high hopes for Warcraft: Lord of the Clans from Blizzard. Although this type of game falls outside the normal Blizzard repertoire, it looks incredible. The first thing you notice about this product is that it has beautiful hand-painted animation. Sure, you can do a lot with SGI workstations, but this is hand-crafted lovely, just as much as the old Disney films are in comparison to the computer animation of Toy Story. The quality of the art and animation is not a function of Blizzard's core design and programming team, or at least it wasn't until Blizzard fell so in love with the work of Animation Magic that it bought them. The U.S. division of Animation Magic is fairly small, but they have over 100 artists and animators working in Russia. These guys are more than good, they're brilliant from what we could see. Everyone can expect a lot more in the way of stunning visuals from Blizzard in the future as a result of this acquisition.



SIMULATIONS

The Simulations genre housed some real winners this year, including Longbow 2. Jane's has rightfully established itself as the dominant development house in the genre of Simulations. Its F-15 title which we previewed behind closed doors at EA will set new standards for the genre as a whole, but Longbow 2 will be released much sooner, and to downplay it in favor of a product that won't come out until much later would be an unforgivable crime. If you still aren't convinced that Jane's intends to dominate this genre, read the review of 688(I) Hunter/Killer in this issue

Longbow 2 takes the AH-64D to new levels of realism. The graphics alone will pop your eyes out, and the program features the most accurate flight model in the business. During night missions, the light sourcing on missiles going down range is stunning, and the FLIR (forward looking infra-red) engine is completely compliant with the third-generation systems deployed by U.S. forces worldwide. Jane's print publications have always prided themselves on being the best unclassified sources of military information available, and this same standard of excellence is evident in their electronic offerings.

Longbow 2 will feature cooperative play over the Internet, either pilot/co-pilot or separate aircraft, team and head-to-head play. You will have the option of flying the AH-64D, of course, or the Kiowa scout or Blackhawk transport. And replaya-

a more pure form of simulation, Bullfrog is rejuvenating one of the most popular gaming series of all times. *Populus: The Third Coming* brings one of the best "God" simulations back to life in a new and exciting way. The original came out in 1989 and its sequel appeared in 1992, but we've all been away from this game world far too long. The newest installment takes us back to a world where players have god-like abilities to command true believ-



ers to find their immortal souls, be reincarnated and serve the deity or face godly retribution at their disposal. Players can still build settlements, attract followers, cast spells and reshape terrain at their will, but now they can do so against other players on a 3D globe that rotates to show you what all the other players are up to as well.

There are dozens of other simulations on the horizon as well, including M1 Tank Platoon 2 by MicroProse, which takes the

modern ground war to similar levels as Jane's Longbow 2 does for the air war, and SimCity 3000 by Maxis, on the more peaceful side of the coin. The latter includes real-time feedback from all of the citizens of the city for the first time, as well as the ability to build structures up to 50,000 feet tall. Gee, this game makes me want to run right out and take a city planner's job!

SPORTS GAMES

The demand for Sports games is

on the rise in the PC community, and it was interesting to note that, if you count martial arts and driving games,

fully 80% of the new titles announced for the PlaySta-

tion were Sports games. Electronic Arts clearly dominates the console-based Sporting field, but Interplay's VR Sports line is

the overall leader on the PC side of the goal line.

The best of the Interplay line is a potential Madden killer: Jimmy Johnson VR Football 98 scraps all of the old playbooks in favor of what teams are using right now, and a coaches clipboard allows players to create new plays on the fly if they like. If you love the sport, you'll love the options this game provides as well. In addition to the current teams, the game also includes Pro Bowl rosters and the greatest teams of the last 40 years. Of course, all of the stadiums are replicated in loving detail as well. The best parts of the game, though, are the play mechanics. One-step play calling simplifies play selection over the old tiers-deep menu system, and a new Quarterback/Receiver logic allows you to pass the ball before the receiver makes his cut. Also, up to five receivers are available for each passing play. The game will appear first on the PlayStation in August, with a PC version later this year.



While Interplay is trying to usurp EA's hold on the Football market, Acclaim has similar aspirations for the Hockey market. NHL Breakaway 98 just might realize those aspirations. EA's NHL series has dominated for years, and so far the only game that came close to taking the Cup away from them was Virgin's NHL Powerplay Hockey. However, nothing that has come out to date offers as many play options as Acclaim's NHL Breakaway 98. For the first time ever, players can specify what style of forechecking will be used and whether or not the goalie will play "stand up" or "butterfly," based on what team they are up against. Individual player styles and statistics are modeled more closely than ever before, and you simply can't ask for more camera angles and control options than this interface allows.

STRATEGY/WARGAMES

StarCraft tops the charts at E3 for the Strategy genre. This follow-on product to the WarCraft series uses the Warcraft II



reference guide to all of the friendly and

enemy platforms modeled in the game.

players and a complete multimedia

engine, but there have been many improvements. The game features a team mode which promotes true, lasting alliances, not the risk-type ally systems where everyone just waits for a weakness to break the alliance. You can't stab the other guy in the back once the alliance is made. You sink or swim together from that point forward. This has its good and bad points, but it is a refreshing change of pace nonetheless. The races in this spacebased game each have unique strengths and weaknesses, so that players will have to use different strategies to win, based not only on which race they are playing but also on what other races are present in a given game.

Since it doesn't make sense to have blocking terrain in space, and blocking terrain was a major feature of the original WarCraft engine because it forced contention for the various maps to occur at natural chokepoints, the design team had to come up with a replacement. As an alternative, they implemented various types of Nebulae; players can pass through these phenomena, but they will suffer penalties for doing so. For example, one race might lose their shields while transiting the Nebula, so they would be very vulnerable to attack during the transit. Opposing players who learn of this might deploy a string of defensive satelmake decisions and tactical tradeoffs if they don't want to treat them as blocking terrain

Some of the missions are interior missions as well, such as taking a group of Space Marines through a tunnel complex to destroy a power plant. These missions will feature unique characters; for example, one of the missions involves a character who can "cyberjack" into a computer system. The other characters must protect this character until he can accomplish his portion of the mission objectives or you fail. These individual characters gain experience over the course of a campaign, and greater player empathy develops for them than was possible with either of the prior releases in the series.

StarCraft features a lot of unique terrain features that only appear in specific scenarios. For example, players may run into Ruins and Wreckage of old spaceships. These special areas might need to be destroyed to accomplish some broader objectives, or they might contain other secrets the player can use.

Everyone will be very happy to see that StarCraft contains a fully functional editor, about 95% comparable to the engine the design team is using to develop the scenarios that will be included with the game. They are only holding back the other 5% of functionality to ensure that the add-on

With the editor, players will be able to specify a whole slew of variables for their individual scenario design. Mission objectives might be to build to a certain level of development or capture a particular area on the game board — whatever players want to specify. Further, they can link a series of scenarios into a campaign and upload it to the Internet for other players to enjoy. You can even use a microphone to record your own mission order for playback by the game. The editor will feature full cut-and-paste functionality, and players will also be able to import their own tile sets if they have a penchant for graphic arts.

Interest in the game on the Internet is already very high. Players are forming Clans and even creating back-story for their involvement in the universe before the game is out. Battle.net support for the product will include a global ranking system so that players can keep track of a leaderboard and participate in both open and closed tournament play. The neat feature of this system is that it will include a form of handicapping. Experienced players will only derive a few points when they defeat newbies, but the latter can score very high if they tackle a veteran opponent. Also, it will be impossible for two players to collaborate and purposefully allow one to stomp the other 50 times in a row to artificially raise the winning player's ranking. To attain and maintain a decent global ranking, players will have to rack up a lot of games with a diverse variety of other players.

Panzer General II dominated the wargame category as cleanly as StarCraft did the strategy genre. For details on that, check out the Panzer General II feature story this issue, for exclusive inside information!

Other standout strategy and wargame titles included *Semper Fi* from Interactive Magic, *Pax Imperia 2* (being published by THQ instead of Blizzard, but still under development by Helitrope) and *X-Com: Apocalypse* by MicroProse.

PARTING SHOTS

It felt good to be fired up about where the industry is headed again. Hopefully, you're fired up now, too! One thing is certain, it's time to go ahead and get that second job for a little while. You'll need to save up your pennies because there are a lot of games coming up that you won't be able to resist. When they're ready, we'll be there to share our thoughts on how that hard-earned money should best be spent.



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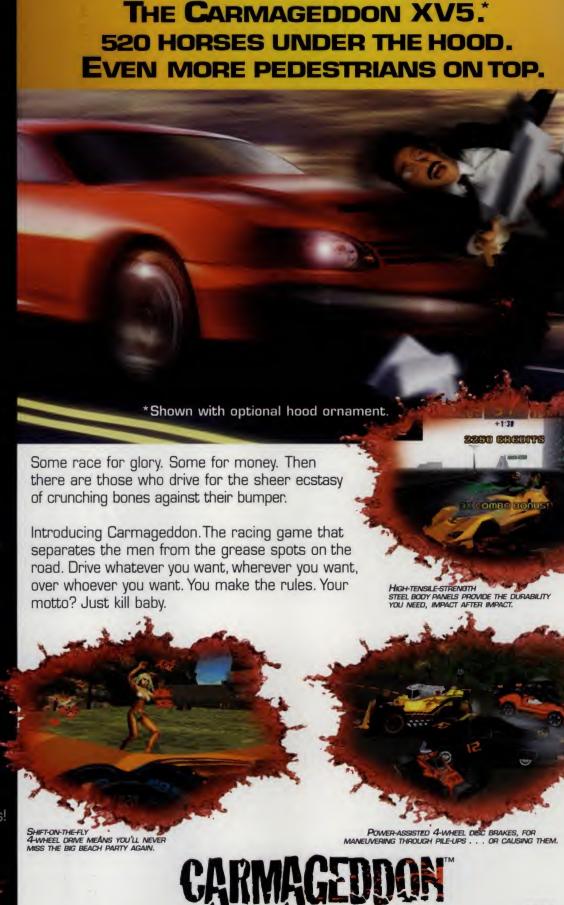
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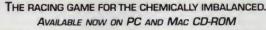
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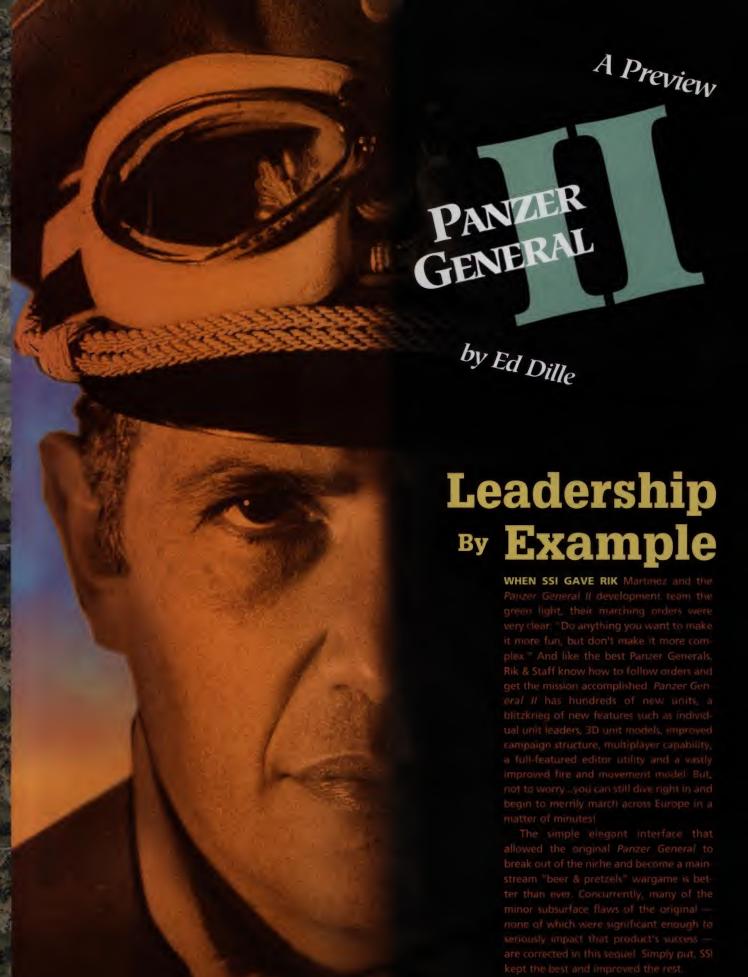












31



side always appeared to face either left or right, regardless of how the actual unit was faced, so players had difficulty keeping track of what attack modifiers were coming into play on a particular tactical engagement. Because of the 3D modeling, *Panzer*

some French tanks and Finnish units equipped with the PzIIIj. There are also a lot of units from the early 1930s as well as unit types that were still in development, or not widely deployed, at war's end, such as the Maus, M-29 and Joseph Stalin III. And since the scenario editor (see below for more details) can use all of these unit types in any combination, it is possible to design and explore any alternative histories you desire. Want to see what would happen if the world went to war in the mid-to late-1930s, or how about a late '40s "super war" involving jet aircraft? You can do it.

THE FACE OF WAR

The first thing veteran players will notice is that the maps and units have been completely redone. The flat, die counter feel of the original has been chucked in favor of a fairly unique hybrid; 3D miniatures type modeling on a hand-painted textured map. It sounds odd at first, because many of us are accustomed to seeing miniatures on a 3D terrain board, but the actual effect SSI has achieved is quite striking.

An artist invested over 300 hours creating each of the 30 hand-painted maps, and it shows. These are no cookie-cutter collections of graphic tiles. Each town, bridge and bend in the river has individual character, depth and texture. Additionally, since the map scale has been standardized at two kilometers per hex across the board (the original varied wildly from 2-30 km depending on the scenario), the tactical terrain of individual battlefields is much more detailed. Finally, the maps themselves, from Savannah to Tobruk, are much larger.

To attain the desired flavor for the unit models, SSI contracted GHQ Micro Armor to provide the miniatures, which were then rotated and captured on a bluescreen background. The resulting digitized images, which retained the scale and proper perspective of the unit from any viewing angle, were imported to the engine not only to improve look and feel but also to correct one of the minor player complaints about the original product. Unit facing is an issue in war and wargames. Tanks have better armor in front than on either side or in the rear. And other types of units are generally weaker in defending against flank attacks than frontal assaults, so it is important for players to quickly see how their units are faced. In the original Panzer General, individual unit icons for a given

General II players will always have the correct visual reference for unit facing throughout their fire and movement phases.

EXPANDED ORDER OF BATTLE

The original Panzer General had a fairly impressive unit database with 420 entries, but these also included many variants of the same vehicle, such as 18 models of Sherman Tanks. In reality, only four models of that tank were tactically different enough to warrant individual entries. As such, the Panzer General II design team decided to scrap all of that type of redundancy from the old database to make room for a lot of new unit types. Some of these are fairly esoteric (like the Romanian Touron Tank), but all of them are tactically

unique. The new database already has over 600 unit types including the complete orders of battle for: Czechoslovakia, Finland, France, Germany, Hungary, Italy, Nationalist and Republican Spain, Norway, Poland, Romania and, of course, the UK, USA and USSR.

SSI has also done a lot of research into Lend Lease, foreign aid and other equipment procurement programs of the period. So don't be surprised to see Poles using

SHAPING THE WAR

Veteran Panzer General players screamed for an editor, and SSI has answered with one of the best implementations of this kind of utility we've seen. Sure, the standard stuff is there, such as the ability to use all of the maps and the entire unit database (which includes some unit types not even used in the scenario designs provided with the game), but there is so much more. For example, one of the problems with the replay value of the original, even in headto-head mode, was that after a scenario had been played a few times, everyone had a pretty good idea where the enemy units would appear, based on the known deployment zones. The editor allows players to both change the existing zones for any scenario and add new ones.

Designers can also scrap the existing orders of battle for any map entirely and simply agree on a specific point value for the opposing armies. Warhammer 40,000 and other miniatures games use similar conventions, but this is the first time they have been employed in a computer product. The basic idea is simple to grasp and so easy to execute that one wonders why no



one has done it before now.

Each unit type has an associated point value that players must expend to purchase it. And the higher the point value, the more capable that individual unit as a rule. If the players want a 5,000-point battle, for example, each commander can select any combination of units and unit types they want as long as the combined total doesn't exceed the 5,000-point cap. The beauty of this kind of system is that it gives players complete flexibility to design and employ the types of forces they think will work best for the scenario map and objectives

countries as well. So, each side can have a joint force from up to five nations, with anywhere from one to three players commanding the side, so long as no more than four players are in the game. In other words, players can go one-on-three, two-on-two or either of the lesser combinations. SSI toyed with the idea of a four player free-for-all multiplayer option, but that diminished the WWII flavor of the game so they decided to scrap it.

SSI hasn't decided yet whether it will do a dedicated server for *Panzer General* II, as Blizzard has done with its Battle.net set number of minutes before control

CAMPAIGNS & BATTLES

Panzer General II currently has five campaigns and 48 individual scenarios, but a few more might be added before the game ships. At least 25% of the scenarios have been designed specifically for multiplayer use. Two of the campaigns are German, one large and one small. The other three smaller campaigns are US, UK and USSR, respectively.

The larger German campaign begins in Nationalist-held Madrid in 1938 and, assuming a string of brilliant victories (more on the victory system in a moment), culminates in a march through Georgia to hook up with Von Manstein's forces outside Knoxville, TN. It might be a good idea to capture the big bomb which the US is building in Oak Ridge while you are at it. The smaller German campaign, Defense of the Reich, will be a favorite among veterans of the original game because it is very challenging. Beginning in late 1942 with Stalingrad and Salerno, the entire campaign is based on German counter-punches to slow and stall the Allied advance. The player's army is essentially a fire brigade, if you will, whose big reward for a successful campaign will be to force the Allies to the negotiating table where Germany can maintain the sanctity of its borders. This advanced campaign also features some rarely modeled battles, like the Norwind German offensive, which occurred after the Battle of the Bulge simply because so many Allied units were out of position. Also the famous Eastern Front tank battle at Kursk, which appears under its German name, Zitadelle.

Veterans will find that the campaign system has been overhauled as well. There are many more branch points in each campaign and more than one or two choices at each point. As before, the players' options at a given branch point are dependent on their level of victory in the last battle. But now, there are more levels of victory: Brilliant Victory, Victory, Tactical Victory and Loss. The latter hasn't changed from before — a losing path is just as bad now. But SSI learned from the original that players never fought the losing paths until after they had already won the campaign brilliantly, choosing instead to replay each scenario until they got it right.

Under the new system, getting a Brilliant Victory is as tough or tougher than the hardest of the Major Victory conditions of the original (such as being able to pull off Operation Sea Lion in 1940). But



being played. Players simply chat in real time while they build and deploy their armies.

Ambitious players can also use the point system to create their own campaigns. All they need to do is save their armies to a spreadsheet or some other form of tracking, from one scenario to the next,

and expend
accumulated
prestige points
to keep their forces

current, just as they would in the hardwired campaign games. This capability opens up a lot of possibilities for online tournament play as well.

Individual scenario designs can be solitaire or multiplayer. The designer must specify a main army on each side, but each side can have units from up to four other concept, or license the product to one or more of the gaming services like Mplayer, TEN or Engage. Either way, standard protocols are supported so players can still use Kali to do their own thing as well. Some other nice multiplayer features include the ability to do army management while the other player is moving units, or to watch that player move units, and toggle back and forth between the two views. Players can also specify whether they will each move a set number of units before the turn shifts to the other player or allow a

when players do so, they will be amply rewarded on the campaign track and in other ways. For example, at the end of the scenario in which they attain a Brilliant Victory, they will be given a one-time chance to procure a unit type which won't become generally available until six to eight months later in the war. They won't be able to replace that unit subsequently, should they take losses until it would normally appear, but nevertheless, this system can be very advantageous to astute Generals who husband their limited resources. And it also reflects the real world. New toys are given to those who have shown they can put them

to the best use.

Normal Victories advance the campaign to similar conclusions, but the player won't get the extra goodies associated with Brilliant Victories. Tactical victories are actually easier to achieve than the Minor Victories of the old system, which keeps players moving forward in the campaign and contributing to the war effort even if they don't end up being immortalized as one of the best generals in history.

Finally, the point system is employed for upgrades between campaigns as well. It used to be that you were given two new core units and X amount of additional points to spend for replacements or new units, for example. Under the new system, three battles into a campaign you might be capable of fielding an 8000-point army. You can build as many units as you want even scrap all of your current force (although you do lose their experience this way) — and build from scratch as long as you stay within the appropriate point value. Again, this gives players tremendous flexibility in altering their army composition over time. The only limitation is memory based; the game can't display more than 50 different types of units at a time but that situation is so artificial that it's a non-issue.

A RECORD OF ACCOMPLISHMENT

One of the breakthrough features of the original campaign system was the ability for units to gain experience and upgrade to new equipment over time. Players developed empathy for their forces and really felt the loss of veteran units that had

fought for them over many battles. This role-playing element is even stronger in Panzer General II. The best new feature is the inclusion of unit leaders. Whenever a unit goes up a level of experience (100 points), there is a percentage chance a leader will emerge for that unit. The longer a player goes without receiving a leader, the greater the chance one will emerge — but when one does the percentages reset to the baseline. The great thing about leaders is that, in addition to enhancing the core combat ability of the unit which they command, they have a randomly generated special ability from a list of over 30 possibilities, some of

which are very cool. For example, one leader might have a Combat Engineer background, which allows their unit to cross rivers; another might be able to

ignore enemy zones of control and slide between units in the enemy line easily.

"THERE ARE FOUR LEVELS OF VICTORY -

BRILLIANT VICTORY.

VICTORY, TACTICAL

VICTORY AND LOSS."

The Inspect Unit screen now includes individual unit histories as well, so it is easy to see how many kills of what kind brought this particular unit to its current level of experience. And the player's screen depicts special Iron Crosses with bronze, silver or gold edging to represent tactical, normal and brilliant victories, respectively, as well as a running casualty total, inflicted and sustained, for the whole army. One other change is that units may now only be upgraded between scenarios.

UNDER THE HOOD

Veterans of the original will also appreciate the tweaks that have been made to the game engine. For example, it is no longer possible to build units in a newly captured city near the front lines. All units must enter the board through appropriate supply points near the edge of the board, in the rear. This means that players will have to plan their purchases further in advance to allow for the time for units to move to the front in support of upcoming offensives. The exception to this is airmobile units, which can appear at a newly captured enemy airfield near the front on the following turn. And, happily, SSI has also reworked the database so that the types of units that are capable of being airmobile reflects reality much more so than before.

Ranged fire is another addition that significantly improves the base model. Each unit now has a ranged attack modifier in addition to its other stats. If a unit is fast or low to the ground, it will be much harder to hit at range. Opposing units will still probably have to move next to that unit to "dig it out," but they can also stand off and still attack if they chose to do so. This adds to the number of units that can attack from a distance and lower enemy entrenchment levels prior to an assault to dislodge that unit. But it also allows the unit that is being subjected to ranged attack to reinforce without penalty, if no enemy units are adjacent to it. This solves one of the complaints about the original product, in that later model tanks perform much better under this system, which is more in keeping with their historically dominant role on the battlefield.

Unit Overrun rules have been significantly altered as well. In the past, it was possible to stall a Blitzkrieg attack by spacing weak units properly over a broad front. Now, if there is a 75% chance that the armored units could kill the unit whose zone of control is impeding their move-



"TO BECOME THE

CONSUMMATE PANZER

GENERAL, PLAYERS WILL

HAVE TO BE GOOD MANAGERS OF THEIR

TIME & RESOURCES."

ment, they can Overrun that unit's zone and keep moving and fighting.

Artillery units are more sophisticated as

well. In the past, they could only provide supporting fire to units which were under attack and adjacent to them. This condition, which is now called close support fire, is just as devastating to attackers as before. But now artillery can also provide supporting fire to any unit within range of its batteries at half strength, unless players elect to disable this option to conserve ammunition.

Level bombers have been removed from the game, and tactical bombers have been given the former's ability to inflict suppression. This not only more accurately reflects the historical role of Stukas and other tactical aircraft, it also removes a former player complaint that level bombers could leave their bases and stay aloft in the field of operations for a month of game time. Also, the old split between anti-aircraft and air-defense units has been eliminated. All units are now air-defense.

The anti-tank rules have been fixed as well. As long as the anti-tank unit fires before it moves, it gets the benefit of initiative (i.e., it shoots first) and full combat value against armor. If the anti-tank unit moves before it shoots, then the opposing tank gets the initiative to shoot first, and the surviving AT units fire at reduced strength. So basically, shoot then move or don't move then shoot, which is the proper use of AT weaponry of the period, anyway.

Finally, and perhaps of greatest importance, players are no longer required to move and fire each unit in turn before going to the next unit. One can move three units, fire two of them, move four more, go back and fire the third unit from the first group in whatever order is desired. This allows for more sophisticated fire and movement schemes.

POST-BATTLE DEBRIEFING

Panzer General II retains the casual, quiet elegance of the original design and adds so much more that players clamored for that it has to be one of the best sequels to come along in any genre in a long time. To become the consummate Panzer General, players will have to be good managers of both their time and resources and also be able to deftly execute the combined arms concept. But they won't have to feel like "War is Hell" while getting that job done — they will be having too much fun for that!





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chair should prepare to raise shields, arm photon torpedoes and engage the latest fleet of *Star Trek* titles set for release in Stardate 1997/98. Since the original television series premiered in 1966, *Star Trek* has grown from cult status into a worldwide phenomenon that includes four television series, eight feature films, over 64 million books in print and, perhaps its most natural spin-off, PC gaming.

Why is Star Trek so durable? It could be because it's based on the appeal of creator Gene Roddenberry's vision of an optimistic, heroic future, where good triumphs over evil via a strict moral code, or the fact that a whole generation has grown up with Klingons, warp engines and catch phrases like "Beam me up, Scotty." Whatever the reason, exploring "strange new worlds" with Starfleet's finest is Mecca to millions. Of course, there can be no heroes without villains, so Star Trek also boasts enough threatening adversaries to keep Starfleet's weaponry as finely tuned as its diplomatic corps, which, by the way, also makes for potentially good gameplay.

Software publishers MicroProse and Interplay have released successful *Star Trek* games in the past years, and the following four titles are next in line.

STAR TREK GENERATIONS

On paper, the 1994 feature film *Star Trek Generations* must have looked like a sure winner. Take two revered Captains of the Enterprise, Kirk and Picard, played by William Shatner and Patrick Stewart, have them join forces to destroy evil scientist Dr. Tolian Soran, played by Malcolm McDowell (who knows a thing or two about playing sociopaths — see our interview), and watch



the fun begin. Unfortunately, Generations, the movie, turned out to be less than stellar, and early reports on Generations, the game, are mixed.

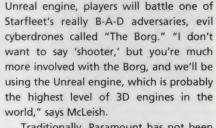
That said, Generations is a big, but basic, action-adventure game based on the film and features voice-overs from Shatner, Stewart, McDowell and the Star Trek: The Next Generation (ST:TNG) cast. The story begins with a seriously unhinged Soran trying to return to a dimension of bliss called the Nexus. No problem, except that his gleeful annihilation of entire star systems to get there has understandably given Starfleet Command a red alert migraine, so Captains and crew are dispatched to stop him.

Though Generations does integrate some clips from the movie in various cutscenes, this is not a FMV game. That's



just fine according to Derek McLeish, senior vice-president of marketing at Spectrum Holobyte, who says, "We try to stay away from anything that looks like FMV. I'm not putting them [FMV games] down, but when you look at the top 20 sellers, you don't find one."

Generations is set on the U.S.S. Enterprise-D, where players assume the role of different Starfleet officers in order to stop Soran's rampage through the galaxy. There



Traditionally, Paramount has not been willing to let software publishers stray too far into the more violent gaming genres,



are three distinct areas of play: stellar cartography, where Soran's position can be scanned; away missions, which are first-person action/adventure sequences; and ship-to-ship space combat, where players use a tactical screen to target and fire at enemy ships. It should be noted that *Generations* uses MMX technology, which enhances the overall graphics and game-play for users that have hardware installed.

Though *Generations* is labeled "action/adventure," McLeish admits it leans more toward storytelling and adventure. MicroProse's next big *Trek* title *First Contact*, releasing in 1998, might be the closest thing to a *Star Trek* action game yet.

STAR TREK: FIRST CONTACT

Based on the much-better received Star Trek: First Contact movie, and utilizing the



probably for fear of someday seeing Captain Picard careening down corridors yelling, "Come get some!" Though it's a safe bet that scenario will never see daylight, the reins are gradually being loosened. "I think Paramount has been much more open," says McLeish, adding that MicroProse works very closely with Paramount's creative group to explore new gaming venues for *Star Trek*.

First Contact will feature all ST:TNG characters. Multiplayer capabilities will let players assume the role of any of the ST:TNG cast. Players will fight a Borg takeover of the Enterprise-E by struggling for control over the ship's crew and systems. Developing new weapons and technological advancements will be crucial to success, because the Borg become immune to weapons very quickly. There's no middle



ground with these deadly drones — you're either assimilated into their Collective or killed; so having your phaser set to "kill" sounds like the right way to win this game.

STAR TREK: STARFLEET ACADEMY

Billed as the "first and only Star Trek flight simulator," Interplay's Star Trek: Starfleet Academy, released this summer, is one of the more eagerly anticipated Trek titles of recent years. Set in the original, or classic (or as some prefer it) Star Trek timeframe, the game takes place at (you guessed it) Starfleet Academy in San Francisco, CA. Players take on the role of cadets who've

completed their first two years at the Academy and who are now ready to see if they have the right stuff for command.

William Shatner, Walter Koenig and George Takei are on hand in FMV as Kirk, Chekhov and Sulu, to offer guidance and help teach cadets what being a Starfleet officer entails. The majority of the game is set in the flight simulator, where players command four Federation starships, including the *Enterprise*, and fly over 24 missions battling 30 enemy ships from a Romulan Heavy Cruiser to a Klingon Bird of Prey. In the flight sim mode, *Academy's* multiplayer option will let up to eight players

helm the ship of their choice, including enemy craft.

Academy is more than just an elaborate flight sim, as producer Rusty Buchert explains: "In between the simulations, you have what I like to term 'My life as a cadet,' where you're dealing with your crew members and things that are occurring at the Academy." How you react to various Academy subplots will directly affect your career and those of your classmates — including ouster and possibly worse. Buchert explains, "You can get yourself booted... you can get yourself killed." Killed seems a bit non-Trek, but Buchert remains mum on

McDowell On Playing Doctor

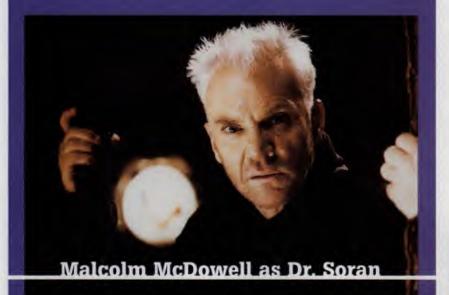
STAR THEX GENERATIONS Dr. Tolian Soran ranks as one of the nastier villains in recent *Trek* memory, due to actor Malcolm McDowell's gung-ho



portrayal. Though he doesn't consider himself typecast, McDowell has logged plenty of screen time (A Clockwork Orange, Cat People), playing guys you definitely don't want to meet in a dark alley. The good doctor certainly qualifies. In brief, Soran wants to return to a dimension of bliss, and everything in his path is expendable.

Not only does Soran have an evil agenda, but he also manages to kill *Trek* icon Captain Kirk (played by William Shatner) during the course of the 1994 feature film. When asked if Trekkers give him a hard time about that, McDowell concedes, "A little... I sort of joke with the fans, but I didn't realize they were quite so serious!" He adds, "I think it's always good to keep a sense of humor myself...we'll leave it like that."

McDowell enjoyed the *Generations* shoot and Soran. "You know he was great fun. It was a wonderful part actually," he says. *Generations* also reunited him with



Patrick Stewart, as ST:TNG's Captain Picard, whom he met 30 years ago at the Royal Shakespeare Company. As for the other Enterprise Captain, "Bill Shatner made me feel very welcome. They were very nice people. Of course they know what they're doing — they've been at it long enough."

Unlike many of his professional peers, McDowell has been acting in CD-ROM games for some time, most notably in Origin's Wing Commander series. When it came time to do the Generations game, all the principals were asked to reprise their roles in voice-over, and McDowell agreed along with Shatner and Stewart. Voice-over is, of course, a different approach to a role, as McDowell explains. "In voice-over, you're given very specific things to do. 'Don't shoot that phaser,' or something, there's not much characterization. If you've seen the film, and you know the voice, that of course fills out the character a lot."

Though he's quick to say that calling new media a new art form is "a little pretentious," McDowell is clearly impressed with CD-ROM technology. "It's catching up very fast with movie quality, and I think it's going to overtake it, and the movies are going to start borrowing from the technology of the games." When asked if he plays computer games, however, he admits, "Not very well — my son wipes the floor with me."

why. "It has to do with politics. Let's just leave it at that." OK, but hopefully we'll have time to try the Kobyashi Maru Maneuver first!

STAR TREK: SECRET OF VULCAN FURY

Though not much information is available at press time, it looks as if Interplay's next title promises more great gameplay for fans of the classic series. Star Trek: Secret of Vulcan Fury, an adventure title due out in November 1997, features the voices of six of the original cast members (only Nichelle Nichols as Uhura is MIA), and a storyline by D.C. Fontana, who penned some of more memorable classic television episodes.

Fury will let gamers play any of their favorite characters — Kirk, Spock, Dr. "Bones" McCoy, Scotty, Sulu or Chekhov — in six new puzzle-based episodes revolving around the shared history of the Vulcan and Romulan races. Drawing on the rich heritage of the Vulcans, each episode's storyline will combine elements of intrigue, sabotage and murder, with nothing less than the fate of the Federation hanging in the balance! Obviously, a little work is required before we can all live long and prosper.

One Trek title that seems to be in space dock is Viacom New Media's Star Trek: Voyager. However, Virgin Interactive has just announced a licensing agreement with Paramount to develop games based on the Star Trek: Voyager television series. Utilizing "the latest 3D technologies and produc-

Vulcan Furv



tion values," Virgin's Voyager games are set for release in 1999 and the start of the 21st century.

If there's one sure bet in the universe, it's that *Star Trek* and its spin-offs will keep boldly going where no one has gone before. And why not? So far, it's a great ride.

Total Annihilation; A New Dimension of Real-Time Strategy by Zach Meston



it's the MOST DEPRESSING and predictable behavioral pattern in the computer gaming industry. Just as a large group of hyenas will pounce on a limping wildebeest (please pardon the analogy—I've been watching too much of The Discovery

Channel lately), so will a large group of game-producing jackals pounce on any breakthrough title and imitate it with varying degrees of success. Myst begat dozens of "atmospheric" point-and-click adventures that were chock-full of pretty

pictures and precious little gameplay; DOOM inspired dozens of crappy corridor shooters that made you want to shoot yourself; most recently, Command & Conquer and WarCraft II have unleashed a deluge of real-time strategy games that are

usually much more complicated than they are fun to play. And while a precious few games have come close to matching the joys of C&C - Virgin Interactive's sadly undermarketed Z, Interplay's flawed but entertaining Fragile Allegiance - nothing has topped it.

Until now, that is. Total Annihilation is to C&C what Duke Nukem 3D was to

DOOM: a student that becomes the master. Instead of using the fundamentally flawed approach of most C&C clones and pouring on the complexity, Total Annihilation (TA) is a welcome return to basics — an easy-to-learn game of futuristic war with the irresistible hook of true three-dimensional graphics and gameplay.

Total Annihilation is the brainchild of Chris Taylor (see sidebar interview), a Canadian programmer and designer with previous stints at Accolade and Electronic Arts. It's also the first game from Seattle, Washington-based Cavedog Entertainment, a division of Humongous Entertainment, the edutainment company founded a few years back by LucasArts veteran Ron Gilbert. Gilbert's name will bring a wide grin to the faces of the jaded gaming veterans among you, as he was the brains behind the classic adventure games

Maniac Mansion and The Secret of Monkey Island, along with the SCUMM engine which drove them both.

In September 1995, after departing EA, Taylor approached Gilbert with his concept of a 3D real-time strategy game, along with a very early demo of the technology showing a "tank" (really just a rectangle) driving over hilly terrain. Impressed by what he saw, Gilbert gave him the green light, and Taylor spent most of the next year turning the rest of his concepts into code. Now, with a late September/early October ship date looming, over 50 people are working on various aspects of the game - including Gilbert, TA's producer, and publishing juggernaut GT Interactive.

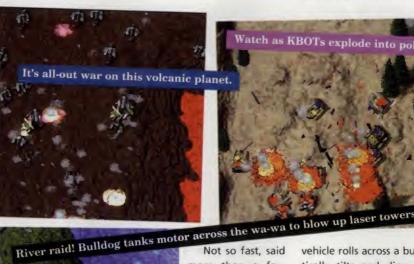
HELL, NO, WE CAN'T ALL JUST **GET ALONG**

What follows is the storyline to justify all the mass destruction — like anyone needs the justification, but I digress. Long, long ago, an organization called the "Core" was the ruler of the galaxy. Core scientists invented a process called "patterning," which allowed them to scan a person's brain and transfer the resulting data into a computer, giving the person immortality of a sort. Core leaders were so enamored of patterning technology that they went and made it a mandatory process for all citizens.

eliminate the opposition, to claim "victory" and to do a happy dance on the enemy's remains.

A DIMENSION OF SIGHT, A DIMENSION OF (SOME) SOUND

As the player heads to the battlefield, he can't help but notice that the terrain, the attack units and the buildings are all splendidly rendered in real-time 3D. As a





more than a few stubborn folks who preferred living in human bodies to being stuffed onto a Zip disk. These flesh-loving rebels ran to the edges of galaxy the and formed a resistance group called the "Arm." It wasn't long after the Arm

came into being that the first skirmishes broke out and the undeclared war was on. The Core fought with machines controlled by patterned people, whereas the Arm used flesh-and-blood soldiers; because the Core could endlessly duplicate its best warriors, the Arm resorted to morally debatable cloning technology. Four thousand years and

many millions of explosions later, the Arm and the Core have whittled each other down to few scattered armies. Most of the planets in the galaxy have been

trashed in the four-millennia conflict. And, in what is perhaps the greatest tragedy of all, the technology for making Frosted Blueberry Pop-Tarts has been forever lost. The only goal for each side now is to completely vehicle rolls across a bumpy field, it realistically tilts and dips. After a group of bombers drops its devastating payload on an enemy installation, the flying machines slowly and smoothly turn for another run. As a tank fires its cannon, the gun recoils and the tank shudders from the blast. When something blows up, it shatters into individual fragments instead of disappearing in a bit-mapped explosion. All these little visual touches aren't individually spectacular, but when absorbed all at once, they give TA a wonderfully original



real-time games declare themselves to be 3D, but they use programming sleight-of-hand or stacked bitmap tiles to achieve the effect. *TA* is true 3D, and not just graphically.

FREEDOM FIGHTER

Take, for example, the issue of terrain height. In real war, claiming and holding the high ground is absolutely crucial to victory. Same deal in TA. It also means making a crucial choice between projectile and line-of-sight weapons; LOS lasers can't hit a target high above, but projectiles can.

Another example: In real war, ships can only come so close to shore or sail so far up a river before running the risk of grounding themselves. Same deal in TA, which has a hefty complement of naval units. And because TA's military units are true 3D, they vary greatly in size, which has a huge impact on battles — some units are too large to reach certain areas on the map.

Since TA is freed from the burden of tile-based maps, there's a very healthy array of landscapes, with battlefields scat-

tered amongst forest worlds, volcanic worlds, metallic worlds, desert worlds, water worlds, lunar worlds and Walt Disney World. (People who believed that last one should immediately report to the Very Expensive Clinic of Gullible Readers for treatment.)

TA's viewpoint of the action is a top-down perspective which can't be moved or rotated — somewhat surprising for a game so otherwise immersed in three-dimensionality. According to Cavedog, there was an earlier version of TA with a polygonal

landscape and configurable camera view, but everyone always ended up choosing a

top-down viewpoint, so they dropped the ugly polygons and went with much prettier bit-mapped terrain.

There are a few more graphics-related surprises. *TA* uses a mere 8-bit palette instead of

the now-standard 16-bit palette, presumably to keep the game moving along at a brisk pace. A hearty round of applause and Arsenio-style "woofs" to

the game's graphics artists, which are working wonders with the 256 colors they've got. (One still dreams about how much keener all the 3D effects would look with a couple thousand more colors, though.) *TA* somewhat makes up for its puny palette by letting the player play in resolutions all the way up to 1280 x 1024 pixels; the game also includes a smattering of massive multiplayer maps for those pumped PCs equipped with 32 or 64(!) megabytes of RAM.

TA doesn't support 3D accelerator cards because, as Taylor explains, "The game is heavy on 3D geometry and light on actual rendering; all the 3D cards on the market are geared toward accelerating the rendering stage. Ninety percent of the screen space is filled with the background, which is all pre-rendered art. If we do 3D card support, the frame rate goes up 5%. I'd rather be criticized for not supporting [the cards] than disappointing people because they spend

as the music is almost always the last ingredient added to the delicate recipe that is a computer game. Cavedog reports that a booming orchestral score has already been recorded, but until it's put into place, I'll have to use my Black Sabbath CDs to create my own evil sound-track.



I GOT YOUR UNITS RIGHT HERE, PAL

The player's main unit in TA is the Commander, a giant robot with which he or she builds structures and reclaims metal, one of TA's two precious resources. (More on that topic in a few paragraphs.) Your Commander is equipped with heavy armor and a Disintegrator Gun, powerful enough to destroy any other unit in the game. Slight problem, though: when the player loses the Commander in one-player mode, the game is over. (In a multiplayer game, he or she can limp onward with what's left of his/her forces.) Hence, one normally keeps the Commander away



extra money and don't get a [noticeable] increase."

TA has solid sound effects — zingy lasers, meaty explosions — but no musical score as of yet. No big surprise,

from the action, constructing stuff and jumping into combat only when absolutely necessary.

There really isn't such a thing as a "base" in TA, as your various buildings can be scattered all over the map and don't need to be touching each other. In fact, having your units too closely spaced is a

very bad idea, as an exploding structure might catch nearby units in the blast and cause a devastating chain reaction.

TA is absolutely stuffed with various units and buildings; both the Arm and the Core have about 75 of each. There are factories which produce mobile vehicles; construction vehicles which let you make even larger buildings; and plenty of military

land, sea, and air units. Factories can be given construction large orders at once; you just put your order into the queue and let the factory catch up. This lets you start construction, fight a battle and come back to the factory to find a veritable army of units waiting for you.

About half of TA's military units are

land-based; the other half split between air and sea. The units can't be upgraded à la WarCraft, but TA does have a reward system of sorts. When a unit scores five kills, it becomes a veteran and gets a skill boost. For example, a veteran tank has a better chance of hitting a moving target.

The action in TA doesn't seem to favor an offensive or defensive approach to combat, although there's quite a bit of emphasis on stealth and concealment. Military units can hide underwater until located by enemy sonar, use stealth technology to disappear from radar screens or activate a cloaking device which keeps them invisible unless an enemy is practically marching on their toes. The smaller units can even hide under the trees of forest worlds.

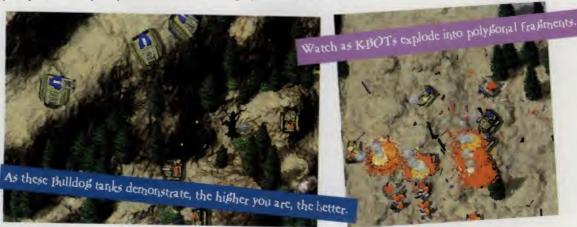
There's also the subtle factor of wind. which is unique to TA. On planets with high winds, it's wise to build wind generators to boost your energy levels. If a forest catches fire, the flames spread downwind, where they slowly damage nearby enemy units. Projectile weapons are affected by wind speed and direction.

Issuing orders to military units is dead simple. The player can command a unit to hold fire, return fire or fire at will and tell it how to maneuver when enemies are nearby. To control groups of units, the player can issue individual orders, click and drag to command a group or create squads. The mini-map in the upper-left corner makes movement commands even easier. It's all driven by a

point-and-click interface, which can be toggled between "left-click" or "right-click" modes, depending on the habits ingrained in you by certain other real-time strategy games.

MAKE WAR, NOT MONEY

TA's simplified gameplay almost completely eliminates the drudgery of resource raw material from the burned-out hulks of destroyed military units (both yours and your enemy's). You can even reclaim a working unit if you're desperate or build a Metal Maker which inefficiently converts energy to metal. To obtain energy, you build solar collectors, tidal generators or whatever is best suited to the surroundings climate.



management, along with the nonsensical C&C concept of earning money. There are only two resources in TA: metal and energy. Building something requires a certain amount of both, but once it's completed, it doesn't use any more energy (with the exception of defenses such as laser towers).

To obtain metal, you set up metal extractors, mine ore out of rocks and, in a neat touch, use the Commander to reclaim

And once an extractor or generator is in place, you start earning the metal or energy immediately, and you can forget about 'em until your damnable foes destroy them. This has the wonderful effect of shifting the gameplay focus to waging war, not keeping an anal-retentive eye on your cash.

DOWNLOAD THIS, RECONFIGURE THAT

Even with the plethora of units in TA, it's inevitable that boredom might set in after, oh, a few hundred hours — which leads to what might be the game's most outstanding feature. Plugging in new units and

THE ARM, THE CORE AND THE UGLY One of Total Annihilation's most impressive features is the sheer number of units and buildings included in the game roughly 75 for each side and 150 in all, with more to be available weekly at Cavedog's Website and in add-on packs available at retail. Here's a peek at 16 of the game's units and buildings, eight from each side.

BUILLAGTANK

buildings is as easy as downloading them from Cavedog's Website — the company plans to provide new stuff on a weekly basis. Cavedog also plans to include new units with add-on discs sold at retail.

Now, you may recall the uproar over the fact that C&C's Red Alert expansion CD did not allow

the new units to be used in the multiplayer mode. **Westwood Studios** claimed it was because adding new units to a real-time strategy game requires a revamp of the Al to keep the game balanced. Cavehowever, dog, says they have the game-bal-

ance problem licked and also points out that you can simply turn off the new units at the start of a multiplayer game. (*TA* even allows you to toggle off the units included with the game or limit the number of total units a player can have.) Cavedog wisely points out that once you master a strategy for a particular unit, boredom starts to set in, but a constant supply of new units keeps the gameplay as fresh as a bar of Irish Spring. It's all part of Cavedog's master plan — *Total Annihilation* was programmed from the ground up to be as expandable and configurable as possible.

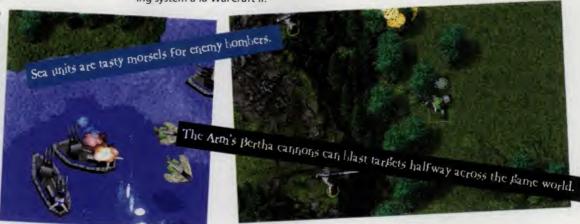
Configurability also figures heavily into TA's approach to the always-tricky "fog of war" issue. Want to see the entire battle-field? No sweat. Want a C&C-style fog with a trail of visible area as you move? It's in there. Want a WarCraft-style fog where you can't see units outside of your vision? Okey-doke. Want a circular fog around

each unit, disregarding true line-of-sight? They can do that, too. No matter what the player's tastes, *TA* has them covered.

THE OBLIGATORY MENTION OF MULTIPLAYER SUPPORT

TA's LAN multiplayer support is a spawning system à la WarCraft II.

inexpensive and easy to use. (A very believable statement.) There will be a multiplayer map editor, although it won't ship with the game; it's still being tweaked into a usable form but should eventually end up on the Cavedog Website or in an add-on pack. (It'll be inter-



Up to three players can engage in combat with a single CD, up to six players with two CDs and up to ten players with three CDs. Currently, TA's Internet mode allows up to four players at once, and Cavedog plans to make the game available on commercial gaming networks but hasn't decided on which ones just yet.

The multiplayer game allows players to share resources, units and information (such as map data) with each other, and the sharing isn't limited to your buddies. You can hand over goodies to your enemy out of sheer insanity, to aid a beginner or to insult your foe by implying that s/he can't beat you fair and square. Any option that lets you tick off an opponent is very, very good.

TA won't include a unit editor, as Cavedog says the game's units are so complex they could never release an editor both

esting to see if any enterprising hackers get out an editor before Cavedog does.)

TOTAL SATISFACTION

Chris Taylor, Ron Gilbert and the rest of Cavedog's design team have pulled off what seemed impossible, breathing new life into a genre about to collapse under the weight of me-too products. Total Annihilation takes the best elements of its predecessors and adds so much to the fun that it's like rediscovering the joys of real-time strategy gaming. The graphics have more than enough pizzazz to suck in casual gamers, and the gameplay depth is more than enough to satisfy the hardcore audience. Even at the current alpha stage of development, Total Annihilation is as fun as Command & Conquer - and when all the final touches are applied, it's a lock to become the new king of real-time strategy games.

ARM



BULLDOG: A heavy assault tank whose bark ain't nothing compared to its Mike Tyson-esque bite.

FREEDOM FIGHTER:

An air-to-air fighter that

escorts Arm bombers as

they merrily nuke Core

Infantry KBOT (Kinetic

Bio-Organic Technology). We're talking mass-pro-

PEEWEE: A cheap

duction destruction

armed KBOT is the

god of thunder...and



FUSION POWER PLANT: Make yourself some energy through the miracle of nuclear reaction.



GEOTHERMAL POWERPLANT: Geothermal: Of or relating to the internal heat of the Earth. — American Heritage Dictionary,



METAL EXTRACTOR: Yanks precious ore straight out of the planet's crust. That's gotta hurt.



SOLAR COLLECTOR: This giant array of panels is good for much more than the hotwater heater.

CORE



A.K.: An Infantry KBOT so cute you almost want to give it a hug.



ENERGY STORAGE: Stash some juice for a rainy day — or when those damn Arm forces blow up



INTIMIDATOR:
A long-range
plasma cannon
with the name of a



METAL EXTRACTOR: Does what it says — just like the Arm version, only

your collectors.



SHADOW: Just bomb it.



VEHICLE PLANT: Let's make us some tanks and transports,

it looks a little cooler.



STORM: A rocketlaunching KBOT with a bad attitude.



WIND GENERATOR: A device which, like most daytime talk shows, gets a lot of use from hot air.



CHRIS TAYLOR

CGE INTERVIEW

CHRIS TAYLOR, LEAD DESIGNER and programmer of *Total Annihilation*, is a fast-talking Canadian whose background in the sportsgame genre would make you

wonder why on earth he's working on a real-time strategy game. But as he revealed to *CGE* during a rapid-fire 15-minute phone interview, he's been chomping at the bit to do *Total Annihilation* since before *C&C* broke the real-time genre wide open. Here's some of what he had to say:

CGE: What games have you previously done?

CT: HardBall II launched my career back in '88. I did that for a company called Distinctive Software up in Canada; it was published by

Accolade. That's when I first met Shelley Day, who's currently the president of Humongous (Cavedog's parent company).

I went on [to Electronic Arts] and built 4D Boxing with Jay McDonald. It was artistically acclaimed; financially it didn't do very well. But it's still mentioned today. I give most of the credit for that to Jay. He was the one who said, "Hey, let's do it this way and that way." He didn't have any experience making games, so I married my skill with his technology.

Then I went on and did some work as a product-manager type person on some Disney products. It's one of those things, "Oh, that sounds better than being a programmer." Then I realized, "You know what? There's no glamor in this."

After I got past that management stint, I prototyped a game called *V-Man*. It was a 3D game for the Sega Genesis, and it was just awesome. It was like *Ballblazer* on the Commodore 64, but completely in 3D, and EA canned it. They just didn't get it. To this day, every single person who's seen that product goes, "Man, that was a cool game. I still don't understand why they canned that thing." It would have shipped about four years ago.

It was a time when EA Canada had to put some money on the table, so they got us all doing sports games — soccer, hockey, basketball and football titles. EA said, "Geez, we really don't have the baseball crowd. Chris, you did a baseball game

before. If anybody can do it, you can." And that's when I started building *Triple Play*. It was on the tail end of the reign of the Genesis, one of the last few purchases people would make on that system. It did really well, and we ported it over to the

Japanese 3DO system. It was just a ridiculous waste of my life. Then C&C came along, and it was the straw that broke the camel's back.

CGE: What inspired your desire to make a real-time strategy game?

CT: I played Dune II (Westwood's pre-C&C real-time game, which featured many similar game-play elements) and immediately said, "I want to build a game like this." I played that game 'til my wife left me.

No kidding. I didn't need to see C&C, I didn't need to see WarCraft II, I knew what I wanted to bring to the experience.

CGE. How long have you been working on Total Application?

CT: Since January '96. I prototyped a unit, it was just the simplest little rectangle, the size of a tank, driving up over hills, twisting and turning through terrain as it went. I showed it to Ron Gilbert and he said, "That's fabulous." Although it was so crude you wouldn't have believed it. So I pulled my Pentium 100 out of a box, installed a few tools and started working. Now we've got almost 30 people on the development side, 20+ people in QA (Quality Assurance). We have people all over the GT world working on all the respective pieces, and manuals, and localization efforts

CGE: How'd you come up with the idea of

CT: Ron and I were brainstorming, and we

just sat and talked about all the things we wanted from the games that were out there. And we said the engine had to be able to support expansion at any level on anything. Units, missions, campaigns, you name it. You drop a file into a directory, and when the program runs, it reads what's in the directory and loads it up. The original idea was to have add-on packs that you bought at the store. Then Ron said, "Let's put 'em up on the Website every week." He's

obviously hit on something huge here. It's one of the top three things that people scream and

shout about.

CGE: What's the number one thing?

CT: 3D. One of the things we talked about was that, hey, everybody's going to

have a 3D game out for Christ-

mas '97. So 3D was only a starting place for us. Let's set the stage in a 3D world, but let's not rely on that to deliver the experience.

CGE: While at E3, did you have a chance to see the other real-time strategy games?

CT: I took a look at (Activision's) Dark Reign. They've taken the concepts of War-Craft II and C&C and married them together. It looked like it was taxing out what I

would call that level of technology. And they did a lot of stuff with units that are weird. There was a vortex thing some guy launched, and it's pulsing, and I'm going, "What the hell is that?" But that's where they've gone. They said, "We can't just put in tanks and jeeps and aircraft and boats. We've gotta do some far-out stuff." Whereas we didn't have to do anything bizarre or weird to make an engrossing game experience.

CGE: How helpful has Ron Gilbert been in the design process?

CT: Instrumental. I don't see how I could've built the same game without him. He just has an ability to figure out what people want. If you're throwing out ideas, and something sticks on Ron, you know there's something to it, and you take a closer look at it. He really does push me harder and farther than I've ever been pushed, and the result is it's going to be the best game it can be.



Flying Nightmares 2:

nares 2:

Development

By Bryan

Walker

Summary

THE ORIGINAL Flying Nightmare, was a Macintosh conversion at the Simis flight

simulation AV-8B Harrier Assault. (The Flying Nightmares nickname comes from the VMA-513 Harrier squadron stationed at Yuma, AZ.) Harrier Assault, a pioneering title in itself, offered the first legitimate strategic sub-game integrated into a flight simulation. It allowed the player to deploy naval and ground forces, while supporting these units with Harrier jets, in an effort to liberate island of East Timor. An updated version of Harrier Assault. SVGA Harrier.

also scored a first for PC flight simulation by featuring 640x480 hardware-accelerated graphics. Though many portions were simplistic, the sense of Immersion that the strategic "virtual battlefield" fostered struck a chord in many players and offered excellent replayability. Since the missions in Harrier Assault weren't "hard-coded," players could roam across the island, destroying targets at will. The ability to control different Harriers at the same time allowed the player to enjoy the "good parts" of combat aviation without all the tedious en route time. Most importantly, Harrier Assault offered two levels of challenge, making players think of themselves both as pilots and as the Operation Commander.

Shortly after the original Flying Night-



mares had shipped, Domark began planning an update disk, adding a Cobra helicopter for the player to fly, as well as multiplayer capability. To that effect, they persuaded me to make the jump from US Army AH-64 pilot to a full-time game producer/designer and take charge of the Flying Nightmares 2 project.

One of the greatest challenges in the FN2 design process has been our commitment to provide something beyond the current status quo in flight simulations. Everyone on the development team noticed that the flight sim genre, in general, had become stuck in a rut. Though many sims have offered truly excellent

technical simulation and increasingly better graphics, the gut-level impact and immersion hasn't advanced since the beginning of the decade. In seeking that



next level of excitement, we're working hard on the *Commandant* multiplayer strategic game feature of FN2.

Commandant takes a traditional highend flight simulation concept, adds a realtime strategic aspect in the vein of Command and Conquer, tempers it with some of Steel Panthers' realism and throws up to 16 players into a exceptionally dynamic real-time battle over LAN or Internet connections. Each team has a player serving as "Commandant"— issuing orders to players flying across the battlefield in Harriers and Cobras, as well as to computer-controlled ground units such as M1-A1 Tanks, LAV-25 Armored Personnel Carriers, Infantry Platoons, Recon Teams and M-109A2 Artillery Batteries. defense is supplied by Hummers with pedestal-mounted Avenger systems and Hawk III radar-guided missiles. CH-46 medium-lift helicopters can transport infantry units behind enemy lines, as well as rescue "downed" players before the enemy units get them (and the information they carry). Small Remotely Piloted Vehicles provide discreet aerial reconnaissance without risking a valuable Harrier or Cobra. EH-60 "Quick Fix" helicopters can thwart enemy advances by jamming their radios and making it impossible for the enemy Commandant to direct them. Finally, E-3 Hawkeye aircraft provide radar coverage over the battlefield.

One of our primary goals with the "Commandant" feature is to appeal to as wide a range of players as possible. As a result, we've integrated a great deal of adjustability into the game setup. It's possible to set the Time of Day, Weather Conditions and Winning Conditions, as well as choose the types of vehicles that will be available in a specific Commandant game. The amount of "unit points" to "purchase" assets can also be decided upon at the beginning of each game. In turn, the Commandant of each team must wisely spend these points to find the right balance of aircraft, ground forces and air defense that fits not only the Weather and Winning

Conditions but also the skills of his or her Team. Given the huge number of "Quake Clans" that have sprouted throughout the Internet, we're looking forward to seeing "virtual squadrons" form up and begin challenging one another in "Commandant" matches over the Internet.

One of our primary concerns in the "Commandant" feature was maintaining the fidelity of the aircraft simulation. This represented a tremendous challenge from both a game design and technological standpoint. The aircraft performance, weapons and avionics have to not only be presented to the player realistically but also have to impact the strategic game properly. One of the offshoots of this approach is the fact that FN2 is the first flight simulation to realistically recreate sighting considerations. For example, a Harrier can fly over a region of heavy woods for hours and never spot an entrenched infantry unit hiding within. A Cobra helicopter has a better chance, being able to not only fly

lower and slower but also having the advantage of two pairs of eyes and telescopic sights. However, if that infantry



unit were to fire on the aircraft, that would drastically change the sighting probabilities and virtually ensure they're being spotted. (It's possible to order units to "Hide" from aircraft by not firing, in hopes of avoiding detection.) The end result of these sighting considerations is not only a delicious fog-of-war effect but also an emphasis on combined-arms doctrine. Air power alone will not win many Commandant battles, and the ground units will not be parked compliantly on a hilltop in plain view waiting to be killed!

As a result of FN2's realistic sighting rules, reconnaissance is of paramount importance. The Recon and RPV units can





provide excellent battlefield intelligence, but any unit that establishes line-of-sight with an enemy unit causes the enemy unit to immediately appear on the Team Commandant's strategic map. Using the ground-target radar modes, player-flown Harriers can also provide high-speed reconnaissance, passing the locations of vehicle concentrations back to the Team Commandant.

Though the "Commandant" feature of FN2 is aimed at the growing online gaming market, we're also aware that not everyone may have access to a multiplayer venue. For solo players, FN2 features the "Cuban Campaign." This campaign is optimized around solo play, providing roughly 24 missions that challenge the player to follow realworld Rules of Engagement and precision weapons employment while supporting the Marines on the ground. Where Commandant games will tend to be chaotic freewheeling affairs, missions in the "Cuban Campaign" focus on accurate navigation, gunnery and the ability to accomplish the mission over all.

The overall idea for the "Commandant" feature came about in an attempt to update the original Harrier Assault strategic concept with a more dynamic, multiplayer backdrop. By increasing the realism of the strategic component and then increasing the immersion by allowing players to actually take part in the battles from inside their aircraft, we felt we could appeal to the hard-core simulation fan and also catch the eye of the many players who'd enjoyed previous real-time strategic titles.

From a designer's standpoint, one of the first things I learned when developing the initial specification for FN2 was that ideas are cheap. I can now say from experience the difference between a simple idea and a coherent, detailed and achievable game specification is represented by hundreds of

hours (if not days) of hard work. Only by agonizing over minute details, seemingly trivial contingencies and occasionally boring formality does the game go from "cool idea" to a legitimate concept. In that respect, computer game design is much like combat aviation—the public tends to see only the excitement and glory of the end result and not the thou-

sands of grueling hours that went into preparing for that shining moment!

From a technical standpoint, FN2's development has been both exciting

and excruciat-A signifiing. factor cant in the "excruciating" part has been the arrival of Microsoft's Windows 95. This operating system essentially represented an entirely new development platform,

one the entire gaming industry has struggled with. FN2's development straddled the arrival of Windows 95, causing our programmers to not only learn this new operating system but also to make fundamental changes in the compilers and supporting technology behind the game itself roughly halfway through the development process. Though painful, the transition to Windows 95 has paid off by allowing a great deal more flexibility in the all-important networking features of the game.

The second technical shockwave to ride out has been the arrival of consumer-level 3D graphics accelerators. Simply put, we feel this hardware represents the single greatest improvement in PC computer game graphics ever. Once players see FN2 running in 640x480 with 65,000 colors, transparent clouds and smoke, bilinear filtering on all textures and 10 different light sources (each with their own color) on a Pentium 133 at 30 frames per second, they'll never settle for 256-color graphics again. Though the promise of Microsoft's

Direct3D providing a universal 3D acceleration solution for games may some day come to pass, we've found that using direct drivers for the Rendition, 3DFX, ATI and S3 accelerators provides an average frame rate increase of 40% over

Direct3D. Though integrating these drivers does require more development time, we're convinced the performance improvements are worth it.

One of the major technical issues facing a flight simulation is the quality of the aircraft modeling. FN2 has benefited greatly from not only the input

from real-life Harrier and helicopter pilots but also from Scott Warren, a DoD flight test engineer who worked on the actual Harrier 2+ evaluation and validation program. Thanks to the hardcore data and



guidance from Scott, FN2's Harrier model performs faithfully to the real thing. In addition, Captain Steve "Shoes" Dunkin, USMC, and Gary Frost of McDonnell Douglas (both of them huge flight sim fans) have been very helpful in providing data on the Harrier's avionics and weaponry, allowing us to recreate them in a way that's both realistic AND accessible. Finally, our visit to see the real VMA-513 was great fun, with Captain Brad "Blower" Stillbower and the rest of the Nightmares cheerfully helping out by not only answering a nonstop stream of stupid questions but also by allowing us to take their full-sized AV-8B simulator for a spin.

When FN2 finally lands on the shelves, it will represent a 30-month development cycle, growing from a 1-man development team and bare-bones conceptual work to gradually involving the work of over a dozen professionals. We're excited about the potential the game possesses and are already looking forward to a Russian-based update disk. After a very long vacation.



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Marines in Space

by Andy Backer

A First Look at Incubation: Time is Running Out



YOU ARE THERE.

The energy shield separating the human colonists from the indigenous Scay'Ger on the planet Scayra has collapsed. A human virus has mutated the

Scay'Ger into bloodthirsty monsters who invade the colony and kill the colonists. You are in charge of a small squad of Space Marines whose job is to protect the humans, contain the Scay'Ger and facilitate an evacuation.

Your first mission is to get your squad to a shuttle platform. The skywalk is blocked by the Gore-Ther. You'll waste ammo if you shoot directly at them because they have incredibly heavy

armor on their front sides. They're built like tanks! But just as tanks are more lightly armored on their backsides, so are the Gore-Ther. Best strategy? Delay the monsters

This view of a Gore-Ther blowing up is from behind enemy lines.

by planting a mine or two and quickly send your troopers around to their rear and kick butt. That done, you you can now get to the shuttle, cross over to the other side of the gap and destroy a half-dozen more lightly armored Scay'Ger. Remember that none of these particular monsters can hurt you from a distance; they're dangerous only in close combat. Your weapons are state-of- theart, long-distance rifles. Once you've finished this first mission, don't spend much time high-fiving your teammates. You have 29 more danger-filled missions to go.

So little time, so many Scay'Ger.

NOT A DOOM CLONE

Incubation is a turn-based, squad-level, tactical combat game. The advance preview copy I saw is quite impressive. I can't wait to get my hands on the final release due out this fall. Incubation is not a DOOM clone. One doesn't win scenarios just by finding a bigger and better gun to blow everyone away; one has to outmaneuver the enemy and outthink them! It isn't like Tomb Raider or the Crusader series, either. Your Marines aren't athletes; they can't climb, jump, leap or roll. They are assigned a limited number of action points each turn and use up the points when moving, applying stimulants or firing their weapons. In that regard, Incubation is more like Jagged Alliance or X-Com — also turn-based, tactical combat games in which squad members use up action points.

A MANY-FEATURED THING

This latest episode in the *Battle Isle* series from Blue Byte Software features real-time 3D animation in 65,000-color SVGA. It uses the remarkable *Extreme Assault* 3D engine, which allows you to view the action from just about anywhere using a mouse-controlled camera with almost complete freedom. Right-clicking the mouse rapidly switches the directions from which the camera views your squad. You can also left-click on screen buttons to give you even

more possible views. For example, you can view the game with the eyes of one of your squad members or from behind enemy lines.

Special effects, such as pieces of monsters flying when they have been shot or your own troopers dissolving into a shower of blood, illustrate the brutal nature of warfare. During battles, cutscenes of individual soldiers zoom up if their weapons jam. Sound effects include the ambient sound of distant gunfire, illustrating that other battles are being won or lost throughout the



colony as you fight yours.

Incubation can be played in single-player, campaign or multiplayer modes. Individual soldiers become more proficient as they gain experience by racking up kills and by surviving missions. The aliens are savage but quite intelligent in single-player mode, and if your squad splits up in an attempt to outmaneuver the enemy, the enemy squad will also split up in order to follow each group of your troopers.

Up to four players can join the battle on a LAN.

FINAL WORDS

The only negatives are that the screens may be too dark—the halls of Scay-Hallwa are dimly lit—and SVGA has reduced the size of the game's animations to *Diablo* size. (But *Diablo* proved to be neither too dark, nor its SVGA animations too small, for the hundreds of thousands who bought the game. Why should *Incubation* fans react any differently?)

Strengths of the preview are (in addition to multiple camera angles) the intelligence of the monsters and the tactical solutions available for the player to outmaneuver them. The game is a special joy for gamers who know military tactics. *Incubation* looks like it's going to be a very successful, durable and highly absorbing entrée into the tactical, combat-game arena.

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Snake in Flight

by Tom 'KC' Basham

A First Look at iF-16 Viper



Neither Digital Integration (DI) nor its publisher, Interactive Magic, is a newcomer to the world of flight simulation. DI's first simulation, *Tornado* (Published by Spectrum Holobyte), carved an indelible mark into the hearts of simulation fans, although it never quite

gained mainstream popularity. An initial look at *iF-16 Viper* reveals a promising product drawing heavily from its ancestors — *Tornado, Apache,* and *Hind*.

fered from one very annoying problem — it didn't properly support throttle controllers. Granted, such devices were relatively new when *Tornado* first shipped; nonetheless, making a Thrustmaster WCS properly operate the throttles proved irritatingly difficult.

Like preceding DI products, *iF-16* focuses on linked missions in lieu of a dynamic campaign generator. Except for a little spit and

THE TORNADO LEGACY

iF-16 clearly traces its roots back to *Tornado*, possessing the same general look and interface found in DI's previous endeavors. *Tornado* achieved fame primarily in three areas. First, it introduced an out-

RIGHT: A good example of terrain distancing effects.

LEFT: Loaded for bear!

standing mission planning system that has served basically unchanged in each of DI's subsequent products. Second, it featured an incredibly detailed avionics suite which gave a fascinating insight into the world of the RAF Tornado. Third, and arguably most importantly, *Tornado* was an incredible gaming experience. Years after its



release, only a handful of products has recreated the thrill of landing a heavily damaged aircraft on only one engine at night, in bad weather, with a strong crosswind. *Tornado*, however, suf-

polish, the interface system appears nearly identical to that of *Apache* and *Hind*. Three theaters, set in Israel, Korea, and Cyprus, offer a variety of mission types with a realistic emphasis on ground attack missions. Each theater contains a list of "Single Missions" and a "Campaign." As with *Apache* and *Hind*, the campaign mode seems to link the single missions together. Mission debriefings vary depending on success or failure.

iF-16 includes that same, wonderful mission planning engine first introduced in *Tornado*. Despite the years, the system still stands as a shining example of how a mission planning system *should* work. By calculating waypoint arrival times, it lets the mission planner closely coordinate multiple strike packages. The system features an excellent reconnaissance system, letting pilots review virtual satellite photos of the target and terrain beforehand. Furthermore, the mission planner features an easy-to-use loadout

screen, quickly identifying which stores may be loaded on which stations. In general, the system provides an incredible amount of information while providing excellent mission-planning flexibility. Inflight, radio chatter helps maintain situational awareness. The wingman offers a variety of radio messages, including bandit calls. The onboard voice system, generally known as "Bitchin' Betty," provides obligatory warnings such as, "Pull up!" Finally, an anonymous controller will notify you, should you accidentally (or intentionally, for that matter) fire on friendly forces.

FLIGHT DYNAMICS

Of course, a flight simulation fan's first question is, "How does it fly?" Overall, iF-16 has a decent flight model. It's always hard to

judge much from a pre-release version, but in general *iF-16* seems to model all the basics. First, maximum G appears to vary with loadout; based on the loadout screen, heavier payloads seem to be restricted to lower g. Exceeding the specified glimit during flight usually crashed the program, indicating that it does indeed observe those g-limits.

RIGHT: The new graphics engine substantially increases object detail.

BOTTOM: The detailed cockpit features accurate symbology.

(track-while-scan) and ACM (air combat mode). The system did appear to model a realistic radar cone, losing radar lock when I pitched the aircraft well above the horizon. In TWS mode, I could change the scan range but was unable to steer the scan cone.

The game features a wide variety of ordinance. Besides the obligatory AIM-120 and AIM-9 air-to-air missiles, the simulation also included AGM-88 HARMs, Durandals, CBU-87M cluster bombs, CBU-89B mine dispensers, AGM-65E laser-guided Mavericks and AGM-65G imaging infrared guided Mavericks.

OUT THE WINDOW

iF-16's graphics have received an overhaul. Personally, I've always preferred crisp, clean, *useful* graphics instead of flash-over-substance, overly texture-mapped, CPU-consum-

The flight model seemed to reasonably understand the angle of attack (AOA), properly coupling speed bleed with high-g maneuvers, although sustained g seemed a little high at 5.5g at 5,000 feet altitude. At slow speeds the aircraft would appropriately descend, even with the nose above the horizon.

Rudders seemed overly effective, causing pretty substantial yaw even at high AOA. In the real F-16, the flight control system dampens and eventually phases out pilot-commanded rudder inputs to avoid departing the aircraft. The simulated F-16 showed no indication of phasing out rudder response as AOA increased. I unsuccessfully attempted to enter a deep stall (an out-of-control situation experienced by the F-16 characterized by a wallowing, flat descent).



AVIONICS AND WEAPONS

Each MFD (multifunction display) has its own set of commands. Pilots must be sure to select the appropriate MFD before issuing said commands. Based on the pre-release software, it appears that only two of the APG-68's air-to-air modes are simulated: TWS

ing images. *iF-16's* graphics seem to fall somewhere between the two categories. Apparently an evolution from DI's earlier graphics engine, this product features significantly more detailed terrain than either *Apache* or *Hind*.



MULTIPLAYER

Like previous DI efforts, *iF-16* supports multiplayer mode. I was unable to actually test multiplayer mode, but the menus indicated both network and two-person (i.e., modem) play will be available. Network mode sported two types of games, "Death Match" and "Capture the Flag." Presumably, Death Match provides a free-for-all, every-man-for-himself arena. Capture the Flag mode required a choice between "red" and "blue" teams, indicating cooperative play.

Two-person mode featured similar choices, "Combat" and "Single Missions." Apparently, campaign mode is not available in any multiplayer session, nor can network players access the Single Missions. The final version will have multiplayer support, although we weren't able to see it in this preview.

At this stage of the game, it appears that iF-16 is in a good, solid state. It certainly promises to be another entertaining chapter in the annals of flight simulation.



You Slay Me

by Judith Weller

A First Look at Ian Livingsone's Deathtrap Dungeon

RIGHT: You are to rescue

lenges you to find your

the City of Fang.

his dungeon.



For fans of Ian Livingstone's Fighting Fantasy books, the wait is over! Deathtrap Dungeon from Eidos, based on this best-selling series, looks like it will appeal to action gameplayers as well as Fighting Fantasy fans. Deathtrap Dungeon will be coming to PCs this fall, backed by 30 man-years of effort and an investment of over 750,000 English Pounds.

The Fighting Fantasy interactive book series, which has sold over 14 million copies worldwide, was a market first; it allowed the reader to actually compose the story. Typically, whenev-

er a branch point in a Fighting Fantasy story was reached, the reader would simply select the choice that s/he wished the character to make and, then, turn to the appropriate page to continue the story.

The basic premise of the game Deathtrap Dungeon is that you are to rescue the City of Fang which, when it was

flourishing, was known as the City of Plenty. But when an evil dragon came to dwell in the vast dungeon outside the

Another option you'll have is that of entering the game at any one of the ten levels. But be forewarned: if you are not sufficiently armed for the event, your time will be short-lived. Spire, Vertigo, Sewer and Circus are just some of the intriguing names of the levels; the monsters and settings, too, tie in with the level names, making for a kind of unity of theme. Each level has its own music, as well; this serves to further integrate the thematic nature of the levels.

The 3D engine used in the game features an atmospheric





city, the City of Fang became the City of the Lost Souls. The evil dragon has issued a challenge to all city-dwellers to try and find their way through the ten levels of his dungeon; whoever succeeds in this, will then finally meet the evil dragon himself in combat. If the challenger wins, the city is saved!

To begin, pick your character, male or female, and be prepared for nonstop action. In this full 3D game, there are two camera angles from which to choose — take your pick. Personally, I preferred the "over the shoulder view" to the "profile view." But not to worry, you won't be stuck with one camera angle throughout the whole game. They may be changed to suit the situation with a quick tap of the Tab key.

lighting system with dynamic lighting, so be sure to check into those corners to ensure you do not miss out on something exciting. Deathtrap Dungeon also offers solo and multiplayer modes, although the preview version I used was lacking the latter. Still and all, I had lots of fun playing with the solo version and trying out the different levels in the game. I have a hunch that players will find Deathtrap Dungeon just as much fun in solo mode as in multiplayer mode.

Since this is a real-time rendering engine, the player will have a choice of playing in VGA or SVGA mode. By today's standards the system requirements are low (P90 with 16MB of RAM); moreover, it will probably run on some lower-end machines, if the memory is there.

The character animation in the game is first rate. I was particularly impressed with the appearance of the player's character. The running and jumping action are especially well-done. The character actually runs as opposed to just walk fast in scissors-leg fashion, as in so many games. Your PC will "turn somersaults" and "jump over boxes," all done with an animator's eye for accurate human movement. (This is one of the few games I have seen where animators have made a big effort to accurately model human movement in various positions and have actually pulled it off.) The monsters are equally well animated, as they leap at the



gamer's character to deliver a quick kick or to wildly hack away with two swords, one in each hand. I enjoyed watching the various animations for the monsters in the game — some of the best I have seen. The game boasts over 50 of them, from Pittfiends and Orcs to Demons, Snake Ladies and other denizens of the dark...with a big evil dragon waiting at the last level.

Although the player's character (either a male or female persona) starts with only a sword, other weapons, armor and magic spells will be found during the course of gamebrings up close combat, F2 brings up missile weapons, F3 shows spells and shields and F4 will bring up potions and charms. As is traditional, the character is equipped with a sword only at the start of the game; there are, however, lots to find on each of the levels as you strive to ready your character for the final encounter.

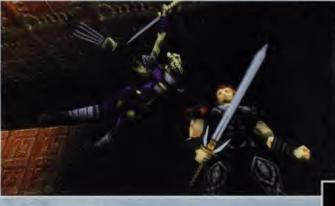
There will be no automap in the game. The player will be able to lay down a chalk marker in the form of an arrow so that directions taken at given crossroads can be known. There was a conscious decision made not to do an automap, as the programmers felt that it was really too difficult to do a proper automap in a true 3D game.

Although Deathtrap Dungeon is a DOS game, it is also WIN 95 friendly. There will also be support for many of the 3D effect cards currently on the market, which will enhance the graphics and gameplay considerably. Many players will be relieved to hear that



this is NOT a DirectX game! With all the trouble that so many gamers have in getting DirectX games to work with their video cards, it is good to see a company not installing DirectX automatically on your hard drive, thereby corrupting your current video card configuration.

All in all, there is something in this game for all fans of action combat games and lovers of medieval fantasy. The SVGA graph-



play. Don't be fooled by the medieval settings; while medieval weapons like swords and hammers are at This is one of the few games to accurately model human movement. Therefore, your character, male or female, should prepare for nonstop action.

hand, players will also find muskets and grenade launchers. The monsters disintegrate into pools of blood or poison when players hack off their arms and legs; the player's character, too, will show signs of wear and tear and blood, as health points begin to drop from monster attacks.

Gamers can use either a keyboard or a joystick. It's worth spending time to master the controls, believe me, for there is a new menace or trap around every corner for the player to negotiate. I found that jumping was a very necessary action — there are plenty of obstacles that require jumping on or off. Many areas of the levels are accessible only by finding boxes and platforms to use as staging areas to get to the top. The game provides a large variety of actions for the character's movement and for weapons use. Inventory is accessed by means of keyboard function keys: F1



ics of the game world enhance the reality of the environment through which you move. The 3D engine offers a wide variety of movement and views, so that those who like the first-person perspective and those who prefer the third-person point of view should be happy. *Deathtrap Dungeon* could be one of the really hot action combat games of 1997 and should have wide appeal to diverse players with its interface and graphics.



Always Faithful

by Robert Mayer

A First Look at Semper Fi: The Tradition Continues



Given the extensive and often stirring history of the United States Marine Corps, it's something of a mystery why there aren't more wargames addressing this elite branch of the armed services. I imagine that

part of the problem has been the Corps' own history. To begin, the Corps was around long before the United States was even forged, although the Corps' more contemporary claim to fame was its tooth-and-nail struggle against the Japanese Empire during World War II. In spite of the fact that an island-hopping campaign has all the makings for a bloody personal drama, it's often been viewed by designers with mixed emotions. Producing a balanced, tactically challenging game on the subject becomes a difficult proposition, made all the more apparent when the player must choose between a satchel charge and a flame-thrower to root out a fanatical, spider hole-inhabiting defender.

Nevertheless, at many other levels, Marine Corps battles aren't

entirely one-sided affairs. This permits game designers many opportunities to fully and carefully explore: amphibious assaults, daring raids, stubborn defenses and cooperative use of air-ground assets. While no doubt taken from a page in history, these aspects of warfare are continued by today's modern warriors. Upholding its traditional role of seaborne invader these past 50 years, they have also been empowered with more telling and decisive roles. With growing





TOP: The Marines prepare to assault a Cuban force holding some crucial villages.

LEFT: The scenario editor should provide gamers with plenty to do when the original scenarios and campaign are exhausted.

BOTTOM: A Russian airborne company, complete with airborne armored vehicles; the Marines have their work cut out for them here.

frequency, they are expected to execute air assault and armored actions typical of today's more fluid form of warfare.

Several computer games have attempted to examine the Leather-

neck saga. Arsenal's *TacOps*, designed by Major Holdrige USMC (a former Marine Corps officer), includes USMC units in many of its scenarios. SSI's *Steel Panthers I* and *II* likewise cover some Marine Corps actions from WWII to the present day. Even SSI's *Wargame Construction Set II: Tanks!* contained Marine Corps units in its copious data base. Interestingly, no game has, to-date, exclusively addressed the Marine Corps or its many important missions. That is, until now.



Even as we speak, Semper Fi: The Tradition Continues should be available at the retail level. Developed by Stanley Associates (designers of 5th Fleet, Wooden Ships & Iron Men and 1830), Semper Fi (Latin for "Always-Faithful") represents Interactive Magic's first entry into the hardcore segment of wargaming. Employing platoon-level units and 300 meter wide hexes, Semper Fi aims to



place players in the role of a battalion commander, fighting myriad foes on a wide assortment of battlefields.

Bear in mind that Semper Fi is an all-Marine show; as such, gamers will be able to access the entire Marine Corps arsenal. Players are charged with undertaking the same type of missions the Corps routinely trains for and must therefore learn to use each weapon, unit and battle doctrine to maximum effect.

Similar in scale to SSI's Tanks!, Semper Fi is much more focused — in the same context as TacOps, throwing in some all-important command and control rules for good measure. At the technical level, Semper Fi isn't quite as detailed as Major Holdridge's masterpiece; it seems the major wasn't all that keen on including the "soft" factors in his design, so a more technical focus became inevitable. Semper Fi, on the other hand, strives to simulate engagements as they might occur on the battlefield, taking into account troop quality and various command and control factors wherever appropriate.

Assuming command over either side's forces means that Semper Fi, at least at the outset, has a leg up on the Arsenal product.

My guess, though, is that *TacOps* will remain the better tool for

RIGHT: Helicopters provide deadly anti-tank support for these Marines refighting the battle of Khafji.



simulating large-scale brigade on up engagements. Semper Fi's inclusion of a linked campaign is another plus. Wargamers will no doubt view this as wonderful news and be overjoyed to learn that they can shepherd a hand-picked force through a series of successively hard-fought battles.

FROM THE HALLS OF MONTEZUMA?

At the time this preview was written, the game had only reached alpha code but was functional nonetheless. First off, Semper Fi is billed as a Windows 95 product — further indication that DOS is all but dead as a viable gaming platform. The graphics are rendered in SVGA, although limited to only 640x480 resolution. The maps, despite their crude and unfinished state, appeared to be crisper than in many other computer games, almost as if actual aerial photographs were being used to depict the battlefield.

There are two zoom magnifications portrayed in the game, both of which are very clear to read and comprehend. Wargamers can rejoice, since Semper Fi also permits the player to display, at the push of a button, contour lines which are commonplace to most military maps. Although only four elevation levels are depicted, the contour lines make it much easier to read the map. Unit counters are attractive and, like the maps, still in an unfinished state. I'm hoping that I-Magic will be able to display units using standard NATO symbology as well as the more commonplace vehicle-and-soldier silhouettes that the game currently provides.

Aurally, the game is about where I would expect a new Windows game to be, and by the time the shrink-wrapped version of the game hits the stores, the quantity and quality of the sound

effects could very well improve.

As far as the interface goes, *Semper Fi* is fairly easy to navigate, though the heavy reliance on right and left mouse clicking is, at times, a mite confusing. Too many factors of play are tied into the mouse; I can only hope that the I-Magic testers refine the inter-



face a bit further. Semper Fi's icons are all sensibly arrived at, easy to identify and interpret. As I mentioned, everything is mouse-driven, with keyboard

equivalents promised for most — but not all — commands. Mapscrolling is smooth, at least on a 200 Mhz machine, which is important as some of the maps in this game are really huge!

Despite its narrow focus, gamers needn't be too concerned about the game's lack of depth. There's lots to fiddle with, from the wide variety of enemy and friendly forces to the many different terrain types included. All sorts of tactical situations abound, providing more than enough grist for the average gamer's mill. Even in the early alpha version I was working from, there were over 40 different types of enemy ground and air units available (plus associated variants, such as headquarters troops) and a like number of Marine units and weapon systems. Unit types include rifle companies and platoons, aircraft — like the Harrier, Hornet and Frogfoot — and helicopters, including the venerable Hind, Havoc and Huey. There are plenty of tanks rumbling across the countryside — everything from the M1 Abrams to T-55s and T-80s. Other vehicles include the USMC's LAV, Soviet-built BMPs and BRDMs and even the Soviet's airborne BMD infantry fighting vehicle.

COMBAT À LA MODE

It doesn't stop there. Semper Fi promises to be an extremely detailed game, offering more realism than even Steel Panthers II provided. In the process, Semper Fi doesn't necessarily demand that the player master the tactical and historical intricacies of battle in order to succeed. To begin, there are five distinct modes of direct fire available: small arms, anti-tank fire directed against armored targets, anti-tank fire directed against soft targets occupying covering terrain, high explosive fire (such as direct-fire artillery or HE shells from tank guns) and anti-aircraft fire.

What's more, each unit may be able to execute one or more types of direct fire combat. On the attack, players select which mode of attack they prefer to initiate by clicking a button on the interface panel. For the novice, *Semper Fi* even includes a default mode of attack for each designated target. Once the player determines which target will come under fire, the computer will automatically match the target with an appropriate mode of attack.

All this detail has been added for a reason. To launch an effective assault in *Semper Fi*, players will have to employ various means of attack to get the job done. Small-arms fire, for instance, affects every unit in a hex but proves to be ineffective against hard targets, e.g., tanks. Anti-tank fire, on the other hand, is useless against soft targets deployed out in the open. Moreover, it only affects a single, specific, hard target in a single hex. In addition, each type of attack is affected by ammunition constraints. Unlike certain wargames, logistics becomes an important and determining factor of combat which can have dramatic consequences in the larger battles.

Furthermore, players will be able to employ various other assets, such as off-board artillery, naval gunfire and air support. Anti-aircraft artillery can be unleashed against attacking enemy planes, and even regular units can expend their small arms ammunition shooting at low-flying Harriers. Although on-board field artillery can, on demand, provide support, off-board support is subject to delays and may, on occasion, not be able to fire at all due to unforeseen circumstances. Choppers play an extremely important role in Marines Corps doctrine, so the game will include both attack and transport helicopters. A particularly nasty and effective means of taking the battle to the enemy, helicopters can attack and move up to four times as often as ground units.

For the first time in a computer wargame, gamers will be permitted to simulate battalion-scale US Marine amphibious and airborne operations, something neither *TacOps* nor *Steel Panthers II* was effectively able to emulate. Handled properly, the meshing of ground effects vehicles, amtracks, helicopters and MV-22 Osprey's should provide an interesting balance of speed, agility and firepower.

Though Semper Fi is a turn-based wargame, it's neither stodgy nor plodding, using, as it does, an impulse system tied into initiative levels to determine movement and combat. The side possessing the prevailing initiative level goes first then selects a unit or formation to activate. Astute players will probably activate an entire company instead of individual units, realizing they can accomplish more tasks with several units. When a company is activated, all of the units within the HQ's command radius are then eligible to take action. Since initiative levels are variable, one side could conceivably move and attack for several consecutive turns. Conversely, players on the short end of the stick could be forced to stand by while better-trained enemy forces run roughshod over their hapless and ill-prepared troops. An impulse system, therefore, turns battles into a fluid, unpredictable and sometimes one-sided affair.

Of course, the introduction of an impulse system means that e-mail play is all but impossible to accomplish; even under ideal

situations, it could

take dozens of file

Gamers can take the role of the OPFOR if they wish; here, North Korean tanks attempt to reunify the peninsula for the glory of Kim Jong-il.

exchanges to play even a simple, short scenario. To compensate, then, Internet, network and modem play are definitely in the cards. Furthermore, solo players needn't despair: even in the alpha version, the computer opponent

seemed competent and moderately aggressive.

TO THE SHORES OF TRIPOLI

Fifteen stand-alone scenarios are included, as well as three distinctively designed Marine campaigns that incorporate a series of interlinked missions. Sadly, when I previewed the game, none of the campaign games was fully operational. So I tinkered with several of the fully realized scenarios that had been made available.

With the resolution of the Cold War, wargame designers have been strained to come up with an assortment of challenging opponents and likely hot spots for future engagements. Semper Fi makes reasonable assumptions, targeting real and potential hot spots (Korea, Cuba, the Middle East) the world over, while adding a smattering of less likely, but intensely interesting, possibilities such as a resurgent and militant Russia. Actions cover the entire spectrum, from light infantry scuffles in Bosnia to full-blown engagements in Korea. Scenarios depict skirmishes between USMC light forces and Cubans, meeting engagements on the Korean DMZ, and the defense of Pantelleria island (in the Mediterranean) against a Russian airborne assault. There are even several Middle Eastern and European battles included in the mix. They all make for interesting "what-if" scenarios.

To accurately portray their real-life mission, *Semper Fi* will also cover a wide variety of terrain and climates, spanning everything from the frigid wastelands of the Arctic to the scorching desert sands of the Middle East.

CODE OF CONDUCT

I encountered a few bugs in the code I was working from. For instance, at present, there's no way to move units hex by hex: once a unit moves — whether it moves one or a dozen hexes, it cannot move again. Headquarters' units aren't marked very clearly, nor can they be loaded onto vehicles. There needs to be more substantial feedback when a unit is selected and deselected. Information regarding ammunition supplies and fire



strengths was still inadequate, while a unit's capabilities were, at best, somewhat murky.

Still, given the work that has gone into this game so far, and its overall quality even at this early stage, there's every reason to believe that the final code will address each of these concerns. Semper Fi will also include a scenario and map builder, thereby letting players design their own battles.

Coming on the heels of *Great Battles of Alexander*, *Semper Fi* is further evidence that Interactive Magic is indeed serious about establishing itself as a strategy and wargame publisher par excellence.

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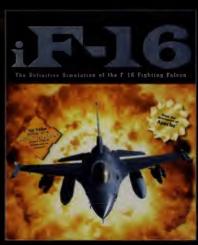


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Give a Truck

by Alan C. Fusco

A First Look at SODA Off-Road Racing



When racing simulation fans think about the most realistic simulations available on the PC platform, invariably their thoughts turn to Papyrus. Papyrus has made a name for itself as a company devoted to developing the most realis-

tic racing simulations possible. Its skills have brought the gaming community such benchmarks as *Indy II* and *Nascar II*. There is no argument that these titles represent the best car modeling (physics), track modeling, graphic detail and racing environment currently available. However, if your tastes in racing don't travel

along the Indy or Nascar line, then realistic simulations are difficult to come by. For instance, if your passion is off-road racing, you were really left out in the cold. *Test Drive: Off-Road* and *Monster Truck Madness* are basically arcade games and the only off-track racing titles I am aware of that are available for the PC. While arcade games can be fun (really, some people do like them), those of us who like detailed simulations get quickly frustrated and bored with the unrealistic physics modeling found in these type of games. A lot of us have vocally and secretly wondered if anyone was going to release a detailed, realistic off-road racing simulation. Well, none other than Papyrus has heard our cries. *SODA Off-Road Racing* will be nearing release (Oct 3rd is the projected date) by the time you read this.

Even though I saw just a pre-Alpha

meet its exacting simulation standards. Secondly, the pre-alpha copy I saw was in surprisingly good shape, with many of the features intact. Thirdly, a talk with Steven Travers from Papyrus has me excited about the fact that this company knows exactly what off-track racing fans want.

The physics modeling is obviously of prime importance to a company like Papyrus, and it is committed to producing the most accurate modeling of off-track racing that is currently possible. This includes proper modeling of vehicle handling, track and road surface modeling, as well as a complete car damage modeling sys-



RIGHT: One of many outside views that are provided in SODA. LEFT: As in real-life, mud covers everything and provides an interesting driving challenge.

copy, enough of the simulation is present to cause me to be cautiously optimistic about its forthcoming release. (OK, I admit it, I am really looking forward to its release!) First of all, this title is being produced by Papyrus, even though most (all?) of the coding is being done by Software Allies. Papyrus has a reputation to uphold, so I don't believe it will release anything that doesn't

tem. The damage modeling system is particularly involved, since the off-track racing is as much about damage control as it is about getting the fastest time on the track. Travers states that in order to win at *SODA*, players will have to

develop a damage-control strategy or they will never finish a race. Obviously, the ability to tweak various vehicle parameters is just as important as an accurate simulation model for off-track racing. Horsepower, gear ratios, transmission, wheel camber, springs, shocks, tire pressure, steering and weight distribution can be tweaked for each vehicle. In fact, diagnostic tools are planned to help the racing fan adjust these parameters for each course. Unfortunately, these tools weren't in place in the pre-alpha, but if they are correctly implemented it should take a lot of the guessing out of optimizing a vehicle's setup. The physics model wasn't completely in place in the version I examined, but it was taking

shape and was, even at that stage, better than anything currently on the market. *SODA* will also allow the player to set such standard options as graphic resolution, automatic or manual transmission, user racing helps and damage modeling. The game will also have support for 3D rendition/acceleration cards and peripherals that support the I-Force force-feedback protocol, such

as the Force F/X stick from CH Products.

The vehicles SODA will model are 2-wheel drive trucks with up to 800 horsepower, 2-wheel drive buggies with up to 150 horsepower and 4-wheel trucks with up to 800 horsepower. The buggy was really fun to drive, but the 4-wheel drive really tears up the road. The program will ship with 12 tracks covering 3 environments: country, desert, and tropics. While this doesn't sound like much, SODA will come with a complete Track Designer program. This is a particularly exciting feature, but one that comes at a steep penalty as well as great benefits. I for one believe the benefits far outweigh the cost. When Papyrus decided to allow the user to build his or her own courses, several immediate problems arose, with graphical detail and artificial opponent Al problems posing the greatest challenge. In Indy and



Nascar, Papyrus had a team of artists working several months, optimizing the look of each track. In addition, they had a team of testers race these tracks in order to program the opponent Al. Neither could happen with SODA. Consequently, the graphics just aren't up to the standards of Indy II and Nascar II. Papyrus believed that in order to develop a easy-to-use track toolkit, the graphic resolution would have to be toned down a notch. After all, most of us can't spend several months designing a beautiful racing track! This is the downside, but I should be quick to add that the graphics are far from ugly. They are very good and more than adequate; they just aren't up to the standards that most gamers will expect. Be forewarned, but before you complain, I believe that most serious gamers will be willing to give up some loss of graphic resolution for the exciting gains this program will give them. These include a very easy track builder, with which an

off-track racing fan can put together a track in 15 or 20 minutes or build some serious tracks in a few hours. These tracks will be small enough to share over the World Wide Web. Imagine racing with others on tracks that you or they design. In addition to the track designer, Papyrus has actually built in an artificial intelligence routine that will teach the computer-controlled vehicles how to race over your tracks! Again, these routines where not present in the prealpha copy I previewed, but



Travers explained to me how these routines would work. If they do work as advertised, track designers

will certainly have challenging computer opponents to race against. As far as I am aware, this will be a first for a racing simulation. Another side benefit of the less-intense graphical rendering and the smaller number of vehicles present in off-track racing is that each and every computer-controlled vehicle will obey the exact same physics modeling as the human opponent. Again, this will be a first for a computer racing simulation. (None of the computer opponents in Papyrus's other racing simulations follow the exact same physics as those that constrain the human driver. This is an area of criticism that gamers leveled at both *Indy II* and *Nascar II*. In all reality, however, the raw computer horsepower was just not available to model the numerous physical constraints for the large number of cars present in Nascar and Indy races.)

If racing computer opponents gets boring, SODA plans to incorporate a 6-player multiplayer mode over the LAN as well as a 2-player modem mode. In addition, Papyrus plans on having an Internet World Wide Ranking System. This is a feature that Steven Travers was particularly excited about. As explained to me, SODA saves the best times on each course, including user-generated courses. These times are then uploaded to a Papyrus Internet site where they are compiled and ranked. The rankings are then downloaded to the individual's computer. This way, an off-road racer can see what his or her ranking is among the entire Internet community. So, in a sense "virtual" races can occur between individuals without the expense of racing over an Internet connection. This is a great ideal and one that I think will be a big selling point for the simulation, by adding an increased measure of

replayability.

All in all, SODA is shaping up to be an exciting and innovative game. Serious racing simulation fans should love the detailed physics modeling and the fact that the computer opponents will be constrained by the same rules that they must obey. Players are bound to like having the ability to design their own tracks and that they can race challenging computer opponents on these tracks. If all the parts come together in the final release, Papyrus should have another hit on its hands.





The Wraith of Imperium

by Brian Workman

A First Look at Uprising



The rebellion is going well. After having taken 15 planets from the Imperium, morale is high. But the glazed look in the eyes of your field commander says he is tired! The fervor of the action has a wearing

effect on the soul. The latest news must not get to the troops, as the line between good and bad has grayed considerably. One thing remains certain though — the evil Imperium must be stopped.

Uprising is a first for Cyclone Studios, as they have never before

delved into the PC game market. Their previous experience was with the old 3DO system where they

produced Captain Quazar and Battle-sport. The new game is a first-person, real-time, strategy title. First-person strategy...? Yes, it sounds unnatural — and for a reason: making a strategy

game first person practically turns it into an action "shooter." The action is as fast-paced and immersive as 3DO claims. There is a lot of "twitch" required for this game, but if a player forgets to ponder at the same time, they succumb.

The enemy's order of battle has two targets: the planet's indigenous forces and the Imperium forces that join them in battling the player. Both forces use alternate-looking units and, as the player will ascertain later in the game, this is important. The big difference between native forces and Imperium forces is that the natives already have units and factories set up (of course) around their own planet.

The player's forces and that of the Imperium must establish citadels and erect factories while managing their energy resource to pay for it all. In addition, the Imperium is also a cagey character to deal with, e.g., the Imperium may notice that you keep attacking it with your troops, so it will bomb your troop factories; if it percieves that you have no SAM sites around a particular citadel, it may dispatch a bomber.

The mission? To clear a given map of all enemy forces and installations, in most cases. There are plans for specific target missions in the final product but they were not available for previewing. To accomplish the missions, the player becomes a field commander and climbs down into the cockpit of a Wraith tank. The Wraith is the most powerful implement of war on the *Uprising* battlefield and rains death and destruction down on the enemy with its lasers, missiles and a medley of other deadly concoctions. Even with the Wraith's awesome firepower, the player requires the assistance of allied units to take control of the battle maps. For this reason the Wraith also serves as a mobile Command Center.

This is where the strategy element of the game comes into play. The player has five types of Allied units that he or she can call into the fray. "Factories" manufacture each force type and must

remain online with the energy available to produce. The energy comes from the player's citadels or bases, which are mined by energy buildings. The concept is much like mining Tiberium in Command & Conquer. Once the player has the energy and the factories to generate units, he or she must intelligently deploy these units from the cockpit of the Wraith. Each unit — whether fire team, tank, AAV (fighter), bomber or even a Killer Satellite — has its own strengths and weaknesses on this plain of battle. For instance, the Wraith itself cannot effectively damage enemy factories, as your



soldiers and bombers have this faculty. This principle of deploying allied might on the battlefield is what singles out *Uprising*. The scope of the game will probably be medium, with randomly generated campaigns of approximately 30 missions and numerous individual training scenarios or battlefield sorties. The campaigns will add another strategy element to the game, developing new technologies. Research then becomes necessary to gain the technologies of war needed to prevail.

Actual gameplay flows much like an action "shooter." The player spends most of his or her time blowing the hell out of the enemy. Speed and fast reflexes play a very large part in the game. The player is occasionally rewarded with power-ups of various types, including extra units, energy or money and extra lives. The strategy element comes into play with unit deployment, research of technologies and the intelligent building of factories. Once two factories of any type are online, the player can then build a booster factory, which increases the capabilities of all units built of that type. It is a nice dividend, but maintaining three factories of any type can be difficult when the enemy is trying to bomb the player's forces into oblivion.

HINTS & TIPS

The key to the game is to grab and govern as many bases or citadels as you can. These citadels supply the power to manufacture forces. As there is a limited supply of power at each citadel, the player must constantly search for new energy sources. This is usually a race against the Imperium, as there are a definite number of bases to mine energy from on each map. Once the player has power he or she also must manage it intelligently, as everything costs — infantry is the cheapest, while a killer satellite attack is tremendously expensive. The indigenous forces, on the other

hand, do not require the energy to build and constantly generate units whenever



rebellion forces are in range. It behooves the player to take these local factories out of action as soon as possible, especially when they are in close proximity to a friendly citadel or to one the player wishes to secure.

The AI will only allow the player a certain abundance of units of each type. Any unit isolated from the action is recalled by hitting the delete key. This gives the player the option to use them again later

in another skirmish on the map. Although the game does not actually allow combined arms tactics, the player can make multipronged attacks by deploying units on different flanks of the target.

ON THE OFFENSIVE

Players must move fast to acquire all open bases and destroy local factories in the process. The real battle starts when the player has to take Imperium bases. This is not a simple task, as these bases are defended by gun turrets, SAM sites, a large assortment of enemy forces and, of course, the citadel itself which has its own powerful cannon. These battles can quickly turn into sheer chaos, and the Wraith, as awesome as it is, cannot take these on alone. The player should first remove any local force factories, as these do not rebuild when destroyed. Next, he or she should take out the enemy turrets and SAM sites with tanks. Then comes the hard part of the battle: taking out the enemy citadel and factories. The player must frantically send troops and bombers to the citadel until it is destroyed. It helps to have at least two troop factories, as some of these eight troops will get through to deploy their satchel charges. Players must endeavor to keep the enemy tanks and AAVs off the center of the base and clear the grounds of factories. Once cleared, players can call their own citadel in on the base and take command.

ON THE DEFENSIVE

The AI allows the player to build three SAM sites or gun towers around each citadel owned. The smart thing to do is to make all of these SAM sites. By deploying tanks in place of the gun towers, the



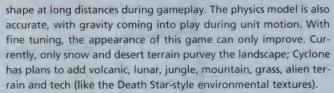
player can beef up the defense of the base. If a base comes under serious attack, players can jump back to the citadel and manage the battle from there, calling in friendly forces just as if they were in the Wraith.

There is also, of course, the citadel's cannon for the trigger-happy action fans out there.

THE DETAILS

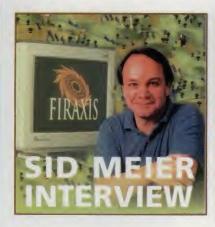
The interface or Al includes the Cyclone TerraTech Engine that gives the 3D look to the game developed by Cyclone. The Al allows

> play by an individual or up to four players to compete by network. Cyclone claims this TerraTech Engine maintains a blazingly fast frame rate, far-out horizon distance and hyper-realistic graphics. Even though the version previewed is early alpha, the engine does appear to display many objects at once in their true



Play balance is good for a game in this plane of development and can again only improve. The AI for the Imperium is active not reactive — and readily challenges the player. Sound effects and background music are still in development. The cinematics for the opening and during play are also in the development stage, along with the player interface screens. Currently, the game does not contain an editor, as the random scenario generation for the campaigns creates a lot of playability. There is, however, a planned release of a map or scenario editor within a couple of months of game's release. Cyclone also has a campaign disk in the works, planned for the summer of '98.

Uprising should appeal predominantly to the action-game fan. Although this game did not initially appeal to me, a serious wargame fan, it eventually won me over. The action, which can get extremely fast and furious, actually creates a "fog of war" feeling to the game. It is impossible to keep total awareness of the battle and plan accordingly at the same time. The player actually becomes immersed in the experience. If the player concentrates on the shooter side, he or she will lose; the same holds true for the strategy side. If Cyclone Studios and 3DO hold true to their blueprint for this game, it should be a great product. There is plenty of time to fine-tune the details of this groundbreaking game before its planned October release.



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ASK ANY OF TODAY'S TOP GAME DESIGNERS who they most admire and chances are they'll answer, "Sid Meier." His string of hits is incredible, from Civilization to Railroad Tycoon. Now, with his new company, Firaxis and fellow veterans Brian Reynolds and Jeff Briggs, his latest work, Gettysburg, is set to hit shelves this fall.

CGE: Last time we spoke, *Gettysburg* was still behind closed doors. What can you tell me about it now? Where's it at?

Sid Meier/Firaxis Games: It's a tactical, action-oriented game about the Battle of Gettysburg. It's had a pretty long history, really. The Civil War is something that I have been interested in for a long time.... I actually started to design about three or four Civil War type games, but up until now, they never really came out the way I wanted them to. I never found an approach that I felt captured what I thought the Civil War battles were like. The first problem was figuring out what to focus on. There are a lot of interesting things... the battles...the maneuvering that leads up to a battle...and the whole strategic aspect of running the war and being Lincoln and making all those decisions.... What I've tried to do in the past, really, is do a couple of those things in one game, and it wasn't fun. Trying to do too much was part of my problem.

CGE: And you've gotten beyond that, obviously

Sid: Well, when I started this project up again last year, I decided to concentrate on the battlefield aspect of it. Nowadays, with these high-resolution graphics and high-powered machines, I could finally do the type of game that I really wanted to do, which was almost a game that looked like toy soldiers, [with] trees and the roads and the soldiers marching around the battlefield (they're going through all the motions and different formations) and the firing, the cannons, horses — kind of like every boy's fantasy.

When I looked at the Civil War game and some of the products that are out there, I really decided the only way to do justice to a Civil War battle was with a real-time game. Part of a battle is unpredictability, being pressed for time and having to make quick decisions. Those things only happen in a real-time environment. One of the concerns I had was that I had tried that approach before — with everything happening at once — in real-time action games. There's a real problem, conveying the feeling that you are controlling what's going on as opposed to your being controlled by what's going on.

CGE: That's a real concern with real-time action games.

Sid: Well, we put a lot of work into this product, into creating an interface. We developed a way of getting information from the game and putting your commands into the game, which solves that problem and really makes it manageable. That was one of the biggest hurdles, and that's why all the real-time games out there are about either fantasy or contrived. I don't mean that in a bad way, but topics are approached in ways that make them work in real-time. I mean, *WarCraft* is great, and I really enjoy playing it, but it is designed...to make it not too complicated for real-time. You know, no one would call that a realistic product. This is really the first time that someone has tried to take a historical, real-life



topic and make a true real-time game out of it. So, I think there are some problems with that approach — the whole manageability thing...not making players feel they are out of control, not able to play, or that the game is playing without them. But, I think we've found some cool solutions to that. That was one of the big challenges of this game. Really, the rest of it kind of fell into place.

I'm interested in the Civil War, and I think a lot of people at least have some familiarity with it. What I try to do with all of my games is to write a game not for the expert on the topic but for someone who knows a little bit about it and wants to use the things they know in a game. I think this game is that type of a game. It doesn't require you to be an expert in the Civil War or anything like that, but through the graphics and the way the game is presented, it almost teaches you what you should be doing.

CGE: Why did you focus on the Battle of Gettysburg specifically?

Sid: The reason we focused on the Battle of Gettysburg was to again solve the problem I'd had in previous games — trying to do too much. When we decided to settle on the Battle of Gettysburg, we had to say to ourselves, "OK. You're going to do a battle. Put your work into getting the individual soldiers and the units to move right, the combat to be right, the terrain to look right and then get everything to work together." It doesn't look anything like Civilization, but there's a parallel in how a number of different, fairly simple things worked together to make something very deep and complex. That's also true for this game... the interaction of the map and the terrain and where the woods, hills and roads are. Then there's the interaction of that with the different units you have and the different generals....Some of the generals are better than others, and some of your units are better than others. You have cannon and cavalry and infantry, and they each have different strengths and weaknesses.

Those are all fairly easy to understand, but when you combine them all and start the clock going [laughs] things are moving in real-time. Every battle is a different experience, and there are a lot of things going on. I see a parallel there with Civilization and a number of other games that I've done. It's fun to take a couple of simple things that you can understand individually, but when you throw them all together and see how they work, they become much more interesting working in conjunction with each other.

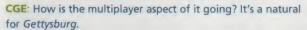
CGE: Just from that description, Sid, it sounds like the AI for Gettysburg must be incredibly complex.

Sid: The AI is a challenge. That's the other difficult part of the game. One thing that helps is that once we developed this interface, which helps the user convey clearly what they want to do in the game, we kind of sneaked pieces of that out and had the AI use the same thing. For one example, one of the ideas here is that your generals have these commands that affect a large number of

units. So, if you want to do some big standard things instead of moving each individual unit into play, you can say, "OK, everybody, this general controls. Form a line..." or "Get into a column and move down this road."

So, you can give commands through the generals that tell a number of your units what to do at the same time. We can use that same logic to simplify the AI by not having it tell every individual unit what to do. We use some of these basic commands as well, so that helps.

This is the first game that I've done which has a multiplayer element to it, and we're actually using that as a good test bed for creating the AI. We've had up to eight players playing. Playing against another human being really stretches you and makes you play very intensely. We get a good sense of balance to the game, so a lot of ideas come out of that, and we then program them into the AI.



Sid: Multiplayer is turning out to be a great deal of fun. I have not been on the front edge of the multiplayer curve up until now. In this game, particularly, it really adds a neat dimension. You can easily play as teams. It's natural to create an army with two or three generals. You can also play a team against the Al. So, two or three players — you know, a stronger player and one or two weaker players — can cooperate to play against the computer. We have had some pretty large team games with three or four people on a side, against each other — plus it makes a fun one-on-one game.

CGE: Obviously having put this much effort into the Al and having what you believe is a solid engine with good gameplay, it seems almost natural that it could be modified to do other battles, especially since there's such a huge Civil War interest.

Sid: That's certainly true. I haven't done a sequel in a while. There's an inherent tendency when you finish a game to not want to ever see it again. [laughs] It's certainly not an illogical thing...to think that we might do some sequels on this.

CGE: Or even something along the lines of *Jagged Alliance*: *Deadly Games*, which allowed you to create your own scenarios....

Sid: Yeah, we are going to leave a number of things open to the user. The scenario creation system, for instance, which is a way of creating, basically, a two- or three- or four-hour time slice out of a battle and determining which units are going to be involved and which part of the map is going to be fought over, etc. That part, we are going to leave open to the user. We'll document to users how they can create their own scenarios. One of the things that's interesting about the Battle of Gettysburg is that there are an incredible number of "What if" questions — you know, What if this had happened?... If only this had happened.... And we are going to explore a number of them ourselves.

CGE: And they are hotly debated questions with Civil War enthusiasts, too.

Sid: Right, and by opening up the scenario system, we'll allow users to create any situation they want and to see what would have happened had Jackson been at Gettysburg or if they had attacked him. There are a bunch of questions like that. The main, important questions, we will create our own scenarios for.... But,



you know, there are many other questions that, for the hardcore Civil War folks, might be answered here. There's going to be a lot of extra stuff that they can do, and hopefully they will pass that along over the Internet to other players. There's an element of the construction set in there, but we're not trying to make this the "Every Battle of the Civil War

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— You Can Do Anything" thing. It's not a total construction set, because it would . . . again, my motto for this project is "Focus." [laughs] I want to be sure that we have the basic game in good shape, and then we'll determine where we can go with it and what sort of variations we can do on it. Right now, we are concentrating on getting this one done.

CGE: When is it going to be released?

Sid: ...Late September, early October.

CGE: That's fast, considering when you got started with Firaxis.

Sid: Well, certain games work, you know. Generally the longer it takes, the worse the game is, because you've run into problems. This game has come together pretty well. Our total development time is going to end up being a year and one or two months. Part of that time I was doing other stuff. So it's going to come out in a little over a year so, which is pretty good. I think the all-time record is *Railroad Tycoon* which took about nine months. *Civilization* was pretty similar. It came out in about a year. I think if a game is working and falling together, it doesn't need to take an incredible amount of time. I think it's true.

CGE: Well, what topics do you like?

Sid: I am very, very tempted to explore the kind of massively multiplayer type game. I think, I don't know if we're quite there yet in terms of technology and the whole infrastructure and revenue model, but you know, I think that once we figure out how to do multiplayer games — games that are really about multiplayer and not these single-player games that are converted into multiplayer — I think it has the potential to be a interesting revolution in gaming. I'd like to do something along those lines. I don't know if the time is right, you know, in the next year or so, or maybe further along.

CGE: It's just your current threat.

Sid: Yeah, that's right. [laughs] There's still a number of topics that haven't been done justice yet. So, even though my games are different, there is a common thread to them. They tend to be about things I liked when I was a kid and spent about a summer getting into. Whether it was the Civil War or history or airplanes or boats or submarines or whatever, they are all about mini-passions I had when I was a child. Now, as an adult, I can go back to them and hopefully have the fun I had as a child, but add the depth that I can add as an adult. I think there is a fair amount of learning in most good games. In the end, that's what a lot of the fun is . . . looking back and saying, "Well, you know, two hours ago I wouldn't have been able to do that, but now, I can. So, I'm a really cool person." [laughs] Hey, making the player feel good about what he or she doing is an important part of a good game.

Cyber Cafe

BY TOM 'KC' BASHAM

MODEMS VS INLAWS

GAMING

The camaraderie developed under such circumstances is amazing. As groups of players develop into effective teams, life-long friendships form. For example, four years ago I invited two people to my wedding whom I'd never met in person before. I was living in the Midwest, and these two gentlemen (call-signs Auger and Wimp) lived on the East Coast. Spread all over the USA, we first "met" each other on CompuServe's FSFO-RUM, worked together as part of the online staff there and flew Red Baron and Air Warrior online together as part of an online squadron. We developed team tactics and learned how to effectively cover one another in the unfriendly skies. Eventually, we all became good friends. When my wife and I decided to hold the wedding reception on the East Coast for members of her family, it seemed unthinkable not to invite such good friends even though I'd never met them in person!

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I had a great time talking airplanes and recounting "there I was" stories into the wee hours of the morning, although I may have neglected my newly established in-laws somewhat. Despite recent news stories, my experiences, when meeting "online" friends for the first time, have been unilaterally positive. The friendships continue today, with the gang meeting at various air shows or conventions a couple of times per year.

VIRTUAL SOUADRONS

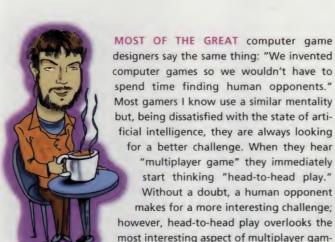
An online squadron, sometimes called a "virtual squadron," offers the perfect opportunity for establishing online friendships. Virtual squadrons are nothing new: they've been around longer than multiplayer games! Virtual squadrons began in the late '80s and early '90s and were initially little more than fan clubs and user groups centered around the members' favorite game. In some cases, the games didn't even support multiplayer functionality, but that didn't stop enthusiastic players from gathering together (both in person and online) to discuss the product, compare scores and discuss tactics.

When products, such as *Flight of the Intruder* and *Falcon 3.0*, opened the door to multiplayer gaming, these enthusiasts were quickly formed into fully operational squadrons. *Falcon 3.0*'s network play ushered in a new era. The thrill of leading a four-ship of F-16s into Iraq was unbelievable. Today, products with online arenas allow six, eight, even 30 individuals to work cooperatively toward a common goal. I have personally led 20+ members of the FSAF Flying Squirrels into virtual combat in a single sortie!

The thrill comes not only from leading such a massive force but also from saving your buddy's virtual life. There is no kill as gratifying as shooting an enemy Zeke off your wingman's six, except maybe when you see your wingman shoot that enemy Zeke off your six!

STARTING A VIRTUAL SQUADRON

So, how does one go about starting a virtual squadron? It's best to identify the squadron's goals right up front. Each person has his or her own reasons for playing a particular game and his or



Many games, especially the online flight simulations, provide unique opportunities to work together with other humans as well as fight against them. Cooperative sorties in *Flight of the Intruder* generated some of my fondest, most vivid, flight sim-related memories. My friend, Sticker, and I took turns lugging our PCs to each other's house for an action-filled *Saturday over Vietnam*. We'd try to start fairly early, hoping to establish the ever-elusive data connection and launch our first sorties by 10 a.m. Eight or nine hours later, we'd be startled back into reality when Sticker's wife returned home and told us it was supper time. Many hours had quickly passed as we attacked SAMs near Hanoi, ships at Haiphong and engaged MiGs over Phuc Yen.

ing: cooperative play.

I remember how we flew escort in F-4 Phantom for computer-controlled A-6 Intruders. I remember limping home in a badly damaged F-4 after a particularly nasty furball. The aircraft was in bad shape. I could barely keep it airborne, let alone effectively disengage from the fight. Sticker, though, kept the bandits at bay while I gingerly drove my wounded bird back to the aircraft carrier. We repeated this scenario countless times, alternating who stayed behind and who took his wounded bird home.

FOTI immediately ended the mission whenever one player landed. Consequently, I remember in one particular sortie where Sticker's F-4 took very heavy damage. Although we managed to disengage from the furball, it quickly became clear that Sticker would never make it all the way back to the carrier. Besides airframe damage, he was losing fuel. In an attempt to use the game's quirk to our advantage, I raced home in full afterburner, trying to land on the ship and end the mission before Sticker splashed into the Gulf of Tonkin. Although I found the ship fairly quickly, Sticker's aircraft was too heavily damaged and plunged into the Gulf just a few minutes before I could land.



her own views on the "right" way to compete. Squadrons work best when the group plays together with a common person. People who like to rack up kills, regardless of the number of times they themselves die, may not be a good match for players concerned with maximizing their own survival. Some squadrons are

nothing more than a loosely assembled group of laid-back players who attempt to work together when it's convenient. Other squadrons assign ranks, form units within the squadron, develop strict mission orders and generally operate like a paramilitary force. The people initially forming the squadron should analyze their likes and dislikes and develop the squadron's charter. Once that's established, they can begin recruiting likeminded players.

Recruiting can be a tricky operation. Generally speaking, it's best to play alongside the potential recruit for a few gaming sessions before handing over the keys to squadron's clubhouse. These activities, although designed for entertainment and relaxation, are not immune to basic human nature. As discussed above, interpersonal relationships form the core of any virtual squadron. Unfortunately, some interpersonal relationships don't work out too well. The last thing the squadron wants is squabble or flame war. The gang wants to play their favorite game; they get enough of such politics at work. So, work with the candidate for a few weeks before inviting him or her into the squad. Make sure all members of the squadron have an opportunity to interact with the recruit before issuing an invitation. This makes the recruiting process somewhat cumbersome but saves headaches down the road.

Next, establish a method of communication. Squadrons use a variety of communications systems based in part on the network hosting the game. Some networks offer private "squadron areas." These private bulletin boards give squad members a free place to chat and exchange tactical information. Unfortunately, the game server retains administrative control over the area. An administrator aligned with a competing group can pose a serious security risk. Squarons tends to discuss many

topics in their private areas, including personal discussions about other players. If squadron members can't risk having those messages divulged, then the squadron should seek a more secure headquarters.

E-mail—especially a private mailing list tends to work well for some squadrons. These systems are usually automated; although some administrator somewhere has access to the group's messages, they're probably not interested in - what they perceive to be - a bunch of silly computer geeks. Mailing lists have one main disadvantage, though. During a hot conversation with many messages flying back and forth, members may find their mailboxes flooded with new messages. Some list servers offer a digest format. They collect inbound messages and send them out as one large message to all recipients a couple of times per day. Although this eliminates mailbox flooding, it makes it difficult to reply to individual authors since all messages are concatenated

into one big block. Also, the squadron must find a list server willing to take on the extra traffic. While there are some sites that will host such mailing lists for free, many sites charge \$10 or so per month for access to a list server.

There are many other communication options, including pri-





vate web pages, private bulletin boards, etc. Each system tends to have advantages and disadvantages, and the squadron simply has to collectively decide which option works best.

Putting a squadron together requires a considerable investment of time, effort and online costs. Pulling the team together and keeping them working harmoniously can be quite challenging. In the heat of battle, though, the mutual support usually overcomes interpersonal conflicts, and the team pulls

together. In general, leaders should try to keep the team as active in the game as possible; the more they're playing, the less time squadron members have to argue! In the end, always remember that the point is to have fun! The burden of virtual leadership can be frustratingly heavy at times. When that happens, it's a clear signal that the squadron has lost sight of their main purpose—having fun.

From the Battlefield

WAR GAMING COMMENTARS

BY ROBERT MAYER

Since the days of Computer Ambush and Computer Bismarck, wargames have remained one of the bulwarks of computer gaming. Frankly, it makes perfect sense; wargames translate well to the computer. They're highly structured, rules-intensive, and chock-full of quantifiable data and mathematical formulae — perfect CPU fodder. Add to this the relatively limited graphics and sound effects most wargames require, and we're left with, what is essentially, a data management

problem — something that programmers have always been adept at solving. It's no surprise, then, that many of the early Apple, Commodore and Atari games were wargames: the games were technically feasible and could utilize existing paradigms (i.e., board games) as models. What's more, there's been a built-in audience of hard-core wargamers — many of whom snatched up computers early on in the PC revolution — who'd literally buy anything containing a combat results table.

Most wargamers will, however, readily acknowledge that the glory days of silicon soldiering seem to have ridden off with the cavalry into the sunset. At one point, there was a deluge of wargames pouring forth, encompassing tactical, operational and strategic levels of warfare. Nowadays, only a smattering of tactical titles exists. There's a drought of operational level wargames, and virtually no new strategic-level simulations have been introduced in quite some time. For killjoys, many of the newest wargames have proven themselves unfulfilling, hi-res SVGA graphics and 16-bit stereo sound displacing much of the hard, empirical data and sophisticated algorithms that the serious wargamer has come to expect.

Of course, there have been exceptions, not to mention the fact that killjoys have been continually grumbling and griping about how the sky is falling for what seems like an eternity (as far as I can tell, the same things were being said about board games 20 years ago!). Still, where there's smoke there's fire, and the objections aren't lodged without good reason. It's hard to deny that, despite some marvelous efforts, computer wargaming has never really reached its full potential in the era of the microcomputer.

HISTORY LESSON

For many years, there were only two ways to play a computer wargame: you vs. the computer opponent, or swapping places ("hot-seating") with a buddy. Years ago, it was difficult to find local opponents for board games and, harder still, to coerce a friend to come over and help warm your favorite chair. Computer wargames have proliferated due, in large part, to the ready and willing computer opponent depicted in the game. Unfortunately,

computer wargames have always had trouble grappling with the concept of developing a competent and challenging computer opponent.

Early on, gamers came to realize the shortcomings of the first generation computer opponents, accepting the inherent limitations of one-megahertz machines. Settling, for the moment, on what was available, many contended that increases in memory, storage capacity and processor speed would inevitably result in better AI.

To be fair, most of the games released during the 1980s were fun to play, even if they didn't contain the most intelligent of foes. SSI's great *Kampfgruppe*, for instance, although sporting a predictable and easy-to-outguess computer opponent, provided hours upon hours of enjoyable gameplay. Over the years, though, expected improvements in Al have, by and large, failed to materialize. In many respects, computer opponents have remained woefully inadequate when stacked up against a wily human opponent.

LESSONS IN CONTRAST

Today, games are graphically more appealing than ever before: the maps rival the best of the board games, while gorgeous units bask under a brilliant SVGA glow. Unfortunately, modern-day computer opponents still leave something to be desired. To offset this somewhat, there are many more options available today for the gamer who may have tired of whipping General Subroutine.

To digress, the play-by-mail (PBM) system, espoused by many of the older board games, was long a staple among the wargaming sect. Immortalized by Avalon Hill's brood of ably suited "classic" games, PBM never actually caught on with the more mainstream hobbyists. Players had one of two options: repeatedly set up each game, record their units' positions, tear down and repeat when necessary or maintain them for months on end, taking up household space when space was available.

Present-day wargames, on the other hand, now contain an e-mail (PBEM) component which has successfully taken up the slack left by the more burdensome PBM. In fact, PBEM has become so popular that it is now viewed as a required element of virtually every new computer wargame. The reasons are obvious: although they may take a long time to complete, they don't require the physical space PBM games normally require; they're relatively immune to pets and children and, of greatest importance, provide a thrilling opportunity to test one's wits against another human opponent. No matter how many times you play against the computer, it's never quite the same as when you first clash with a human foe. An uncertain and challenging prospect, PBEM is highly exhilarating, raising the "excitement bar" up several notches.

Just a few years ago, play by e-mail systems weren't included in the games of the day. Workarounds, using saved games, were possible, but these required two trusting and computer-savvy players to pull it off. In the last several years, PBEM games have emerged as a viable and fully accepted method of play. Virtually every recently released turn-based wargame ships with a fully integrated e-mail component: *TacOps, Steel Panthers*, HPS and Talonsoft's products — these and many more offer effortless and painless PBEM capability. Even some of the larger scale strategy games —



satisfactory or above average. In Comanche 3, the illusion of low-level flight is so good it will actually cause many gamers to ignore some of the flaws in the flight model. Since you're going to be spending your hard-earned money on a game, you need to be brutally honest with yourself. If you really value having state of the art graphics in your simulations, then you may be willing to overlook "flaws" in the flight model to get them. Be honest! It's your money, and no one wants to waste \$50 dollars.

Another user aspect is the learning curve. There is no question in my mind that Longbow Gold is definitely the harder game to learn and master. If I want to fire up one of these games for a quick round of play, Comanche 3 is going to win. If I haven't played Longbow in a few weeks, it is painful to go through the learning curve all over again. However, I can usually pick up Comanche 3 and be up and running after a brief look at the major keyboard commands. If you have only 30 or 60 minute bits of time in which to play a game, you will be most happy with one with a lower learning curve, since you will never be able to master a more detailed simulation. It really doesn't matter what you would ideally prefer if you just don't have the time. I happen to enjoy an occasional RPG. I like them big, detailed and with a good story line, but unfortunately my ideal RPG doesn't mesh with my reality. I just don't have the time for the RPGs I say that I like and, consequently, I have a few nice-looking bookends taking up space on my bookshelf. In all reality, I will never finish these games. Be careful or the same thing will happen with your simulation purchase!

When it comes to fun, both simulations are highly enjoyable for different reasons. Comanche 3 definitely has a more arcade-like feel, but nothing beats the graphics, the feel of low-level flying and the way everything can be destroyed. Completing a mission in Longbow gives the simulation pilot a feeling of accomplishment in planning the mission, coordinating the attacks with his or her wingman and returning safely after a long and grueling mission. Finally, if you value a highly detailed and informative manual, Longbow wins hands-down. It is one of the best manuals I have ever seen. Comanche 3 gives you the basics but not much more.

So which simulator is better, Longbow Gold or Comanche 3? Well, in all reality (forgive the pun), I can't make that call for you; I can only make it for me. Both have their following and both have their pros and cons. If you want a highly detailed simulation, don't mind less than state of the art graphics, have the time to wade through a detailed manual and a large number of keyboard commands and, most importantly, have the ability to spend the hours each night required to get proficient at flying, Longbow Gold is your cup of tea. If, however, you can live with a credible simulation (and let's face it, the flight model in



Comanche 3 is very good) that has a fairly low learning curve and the best graphics found in any simulation, then Comanche 3 may be a good choice.

What's my preference? Well, I prefer detailed simulations and in my book, Longbow Gold wins. However, when I want to just sit back and enjoy the scenery and don't have the time to get through a mission in Longbow, I will fire up Comanche 3. This isn't to say that some of the missions in Comanche 3 aren't time-consuming and frustrating, they certainly are! But I can always go back to a lower level and just sit back and enjoy. Frankly, there is a place and, more importantly, a market for both types of simulations.

There will always be a call for more and more detail in simulators, be they flight simulators, tank simulators or car simulators. But with more detail comes a higher learning curve and more frustration for the user. Yes, the game designers can put "reality" toggles in their game so the player can reduce the simulator detail, but by their very nature these games were designed for optimum play at the higher reality levels. Thus, there will always be a call for games with credible, but less detailed, flight models (we aren't talking about arcade games here) that are optimized for gameplay at this level. There's a large number of gamers out there who just don't have the time and energy it takes to learn all the nuances of a highly detailed simulation, but who still want something more than an arcade game. I believe that, as our computing horsepower increases, we are going to see more and more realistic simulations, but I also believe that only the most dedicated people will have the time to learn and play these simulations. Thus gamers, publishers and designers need to work together to design both mid- and high-level simulations.

As for you, be careful when reading reviews and online comments. Be honest with yourself and about your likes and dislikes. Don't succumb to the "if it doesn't model X, it's a crappy simulator" mentality that takes place on many newsgroups and online services. Make sure X is really important to you before deciding not to purchase a game. Hopefully this discussion will enable you to better analyze the discussions that take place over the Internet with regard to the simulator you are considering buying as well as see through the hype that some publishers seem all too ready to heap upon their newest and greatest simulator.

As for my fellow reviewers and me, we need to be careful. A simulation just doesn't live by physics modeling alone. We need to be aware of other factors that go into making a great simulator, not the least of which is fun. Remember that we are talking about a \$50 game, not a multimillion dollar military-grade training simulation. At some point, realism and the reality of gaming need to merge to form some sort of happy medium.

You may contact me at afusco@msn.com or AFusco@aol.com.(III)

Control Tower



"feel" of skimming over tree tops at 50 feet, nothing beats Comanche 3. When it comes to



BY ALAN C. FUSCO

HOW REAL IS REAL. PART 2.
LONGBOW GOLD VS COMANCHE 3.

Last month I started a discussion on how close to "real life" a game must be before it can be classified as a simulator. I stated that there were at least three main factors that need to be taken into account in evaluating any simulator: user preference or tolerance, how

the publishers promote the simulator and how the simulator fares in the various

departments it is trying to model. This month I would like to "flesh-out" last month's discussions by comparing two helicopter simulators currently on the market: Longbow Gold by Origin and Comanche 3 published by Novalogic. Both publishers claim these games simulate the real thing and so, from the publishers' own advertising and hype, these games can be rightfully analyzed as simulators. How do these games compare in terms of modeling

the real thing? Let's look at some simulation parameters:

This chart needs a little explanation. First of all, the flight model in *Longbow Gold* is

very realistic. This doesn't just come from me, as I have never flown one of these beasts. Online comments from people in the know (assuming these people have properly represented themselves) have stated that the simulated *Longbow* handles pretty close to the real thing. It is definitely more difficult to fly than *Comanche 3*. The publisher of *Comanche 3* claims they have a very realistic model, but it is very difficult to evaluate

since very few people have actually flown the real thing. Secondly, there is no question that avionics and instrumentation modeling in *Longbow Gold* is



superior to Comanche 3. It is detailed, complex and takes some practice before one becomes comfortable with all the possible modes of the Multi-Function Displays (MFDs), Integrated Helmet and Display Sight System (IHADSS), and Target Acquisition and Designation Sight (TADS) system. However, when it comes to graphical representation of low-level flight and the sheer

modeling a wingman (or Team Mate for Comanche 3 buffs), Longbow again wins. The number of commands that can be given to a wingman and his or her intelligence is vastly superior in Longbow. In Comanche 3 it is very much you against the world, in spite of publisher's hype to the contrary. In fact this drastically reduces campaign believability in Comanche 3. The pilot is often placed in situations of overwhelming odds. Of course, with odds like this the enemy Al doesn't have to be that great, and once again Longbow beats Comanche 3 in this department.

Now it seems from these factors that Longbow Gold is clearly the superior simulator, since these are the factors that reality buffs value the highest, or do they? Certainly these are the factors that most reviews dwell on, and they are important, but in evaluating these simulations, the player — you – has some very important decisions to make. There are other more subjective factors that will directly affect how you feel about the game and whether it just becomes an expensive bookend. Let's look at some of them:

In this day and age, many gamers place graphics over gameplay and reality. They say they don't, but in reality they do. What was the most barbed complaint leveraged against Interactive Magic's Abrams iM1A2? — the graphics were below standard. I didn't think that affected gameplay, as the graphics were very functional and even pretty, but many reviewers and players disagreed. They voted for graphics over gameplay and realism.

There is nothing necessarily wrong with this, especially if the gameplay is

Item	Longbow Gold	Comanche 3
Flight Model		Average
Avionics	Excellent	Average
Graphic Rendering of Low Level Flight		Excellent
Weapon Modeling		Above Averag
Wingman Modeling (Computer)		Poor
Copilot Modeling (Computer)		Average
Squad Management		
Combat Environment (AI)	Excellent	Average
Campaign "Reality"		Average

Longbow Gold	Comanche 3	
Average	Superior	
	Low	
High	High	
Excellent and Detailed	Average and Sketchy	
	Average High High	

Emperor of the Fading Suns, History of the World and Stars!, an early e-mail leader - contain fully featured e-mail support.

Playing games by e-mail does have its drawbacks: games can take a long time to finish and, by their very nature, involve many file-exchanges, oftentimes over a network. Regardless, PBEM allows players, world over, to compete against one another



Kali and DWANGO) et al., grown in popularity, housing an evergrowing list of multiplayer-capable titles. While Quake and Outlaws have hung out their welcome sign for some time now, the 'Net is fast becoming a great meeting place for strategy and wargamers, too. For instance, Interactive Magic's Great Battles of Alexander lets players decide which of two armies they choose to field, when reenacting any one of several battles from the time of the ancients. Microsoft's Close Combat and its upcoming seguel, A Bridge Too Far, permit gamers to refight two of WWII's most crucial battles. And let's not forget that SSG's The Ardennes Offensive, another WWI-based wargame, provides both PBEM and Internet-capable play, thereby ably patrolling both gaming bases. Rest assured, virtually every real-time strategy and war game released from here on out will include Internet play in some form or another.

Still, there are times when solo gaming may be preferred. Even

without undue hassle. Players needn't worry about owning a super-sophisticated computer or a highspeed ISDN to play; it's just you and your friend and the random number generator wedged in between.

ost of several file exchanges each turn.

There are, of course, loads of games where PBEM isn't a feasible option. Real-time games, epitomized by the Command & Conquer and Warcraft franchises, are, by design, incapable of supporting e-mail functionality. Even wargames like Close Combat and Great Battles of Alexander are plagued by this real-time constraint.

CYBER HOOKS

The earliest multiplayer games looked to serial connections, modems and local area networks to address the perplexing real-time dilemma. Gamers, as it turns out, quickly cried foul, claiming, among other things,

that they craved more than two-player support, were unable to locate opponents within their local calling areas or didn't have access to a LAN, common outside the workplace. The solution, of course, was real-time network Internet play. Westwood Chat, the home of Command & Conquer: Red Alert, has done for strategy gamers what Blizzard's battle.net has done for action gamers: provide an outlet for online gamers.

Internet gaming has, with the early assistance of DOOM (via



Internet games take more time, preparation and attention than do solo games and, depending upon the game and your mood, a quiet, contemplative bout against the CPU might be the more prudent course of action. Let's not forget that the vast majority of people still haven't discovered the on-ramp to the super-information highway. Therefore good Al programming will continue to remain an important and integral component of both war and strategy games for some time to come.

Piece of

explore every possibility — rather, that these have always been icing on the cake and not the main methods by which the game advances. The really cool thing

are plugging into that engine.

Sin avoids that sin with style. The game features six multilevel missions where the player's every move has consequences on the remainder of the game. The environments are fully functional; every control board, terminal and power panel has a specific function in the game. Fire wildly and destroy a console in error, and the lights might go out where you are - or at other points in the game, machinery might overheat and pose hazards that wouldn't have otherwise been there. Further, the missions themselves are definitely not all combat-based. Sometimes players will need to sabotage equipment, recover items, even do clandestine

about some of the action titles at E3, however, is that they raise the notch on the genre as a whole and make it even more immersive than ever before.

Take Sin, for example: This under-hyped hybrid action shooter is being developed by Ritual Entertainment (whose first game was Scourge of Armageddon) for distribution by Activision. Purists will want to know that it uses a modified Quake engine with 16-bit textures, colored lighting and various other whizbang programming tricks, but that's just the surface stuff, the eye candy that draws you in. Once you bite down, you'll find an honest-to-goodness game design underpinning this title. I can't overemphasize how rare that is in an industry that just loves to make clones of whatever hot new engine has player's interest at the time, with absolutely no regard for the game elements they

> reconnaissance missions where contact with the enemy means failure.

Old-time gamers will recognize a parallel between this development trend and a similar one that occurred in the role-playing genre several years back. When RPGs first came on the scene, players were happy to ransack dungeons endlessly, just to keep the monsters

coming. But it didn't take too long before those simplistic designs were regularly denigrated by players as "hack and slash" epics with little other redeeming values. Well, the honeymoon with DOOM and all of its first and second generation descendants is over, too! Players are crying out for more than just another "stab and grab." Bring on Sin and dozens more like it, but once you go there don't ever look back. You might end up a pillar of salt.

the Action

BY EDWARD DILLE



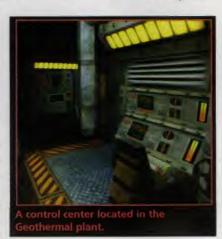
The annual Electronic Entertainment Expo, commonly called E3, featured its fair share of action this year. Atlanta was hot but the games were hotter. For a gamer, it was three days of desire, fondling and playing the best of what's yet to come but knowing you won't see any of it again for months or, in some cases, even a year or more. We'll talk about the best action game at the show in a minute, but first it's soapbox time. If I have to listen to one more PR new-

bie who doesn't know an "action game" from an "arcade game," I think I will pack a gun at the next show and illustrate the difference. As a rule, arcade games use a two-dimensional, thirdperson perspective, which means that players are looking at and controlling their onscreen alter ego — be it Pac-Man or a helicopter — from a distance. They might as well be God controlling that character, because they don't have the point of view of the character or object itself. As such, they are not really able to suspend their disbelief long enough to forget they are playing a

Action games like DOOM and Quake increase the player's ability to immerse themselves in the game by portraying the action from a first-person perspective. The player is enticed to believe that they are the onscreen character. Few players feel for Pac man when the Ghosts gobble him up, but most players do mourn to a certain degree when Duke Nukem bites it. Why? Because first-person perspective promotes empathy between the player and their onscreen alter ego.

Traditionally, both Action and Arcade titles emphasize

dexterity above all other player attributes. That is why they have been derisively referred to as "twitch" games by fans of more cerebral challenges. This is not to say that Action and Arcade titles cannot have embedded puzzles and other design elements that reward players who think a level through and



From The Pressbox



COMMENT

BY BILL HOLMES

WELCOME BACK to The Press Box, where this month I'd like to share one of my fantasies with all of you. Hey - come back here! Not that kind of fantasy! This is a sports column, you know....

What I'm talking about is a peek into the future of sports gaming, where big changes are on the horizon. The way technology is screeching ahead, we may get there sooner than we think. What's the next big

thing, you ask? Simple - take the multiplayer abilities of war games and arcade programs and combine it with sports and you get...interactive team competition!

Sure, we play golf head-to-head

now, even four or more players at a time, but golf is a you-against-the-course game that gets played one player at a time. Other golfers don't have to react to your shots. Even the best programs on the market right now muster an animated caddie at best. What I'm talking about is the type of adrenaline rush that a DOOM player gets when s/he rounds the corner

and stares into an opponent's armed character, knowing there's a human mind behind it, locking and loading. It's like the buzz that a combat pilot gets when he breaks out of a cloud pattern only to see and hear tracer bullets ripping his fuselage to shreds. So why not team sports?

Let's start humbly. Years ago arcade and action boxing games gave us the ability to fight skilled computer opponents first in overhead view, then 3D and, finally, first person perspective. But for all the abilities the program had, any player of moderate skill could figure out the patterns after a while and beat the Al opponent senseless. So why not step up the software now to let players box head-to-head? Far less terrain than a space or combat sim, only two players to track and, if you don't make an Andrew Maybe the simplest to do and a true

Golata sprite, only one half of the body

to animate on a totally fluid level. Planes take damage and become less effective, so why not humans? With a joystick to move in and out and up and down, and with buttons to throw jabs, hooks, straight punches and uppercuts, a sensible boxing (did I really put those two words back-to-back?) program could

provide endless thrills and would spawn thousands of online tournaments. No one gets hurt for real, and Don King isn't anywhere to be found. Just one thing — please do not make a Michael Buffer sprite, or I'll knock him out first.

Then let's go basketball. OK, we're up to ten players but only nine need to be animated. The background can be sacrificed to gain animation speed; all that's really needed are the baskets. If necessary, blow off the animated referees, too. Again, the joystick for direction and buttons to pass, shoot, dribble and block. Imagine the thrill of being in an online pickup game where (just like real life) you're not certain if your teammates are going to be there at the cut or feed you on the break. Just like the playground, teams that learn to act like teams survive, and teams with hot-dog ball hogs fail. There's a small enough number of players, so gathering an online group should be a snap — and you're always in the game in some way. You supply the sweat and the

Everybody is involved, and anything can happen, plus each person gets to play offense and defense!

fielders has a first-person view along with the batter. The pitcher, catcher and batter are the primary concerns, but even as a fielder you can shift a few steps in or charge for a bunt if you need to. Catching would have to be as simple as getting

in front of the ball (or under, for outfielders), but throwing would be an individual exercise. As a pitcher, I can bait and fool batters in most baseball games, but a thinking opponent might not be so easy. And imagine the thrill of swatting a McGwire-like home run and dropping your bat as you watch it sail skyward!

Gatorade. Base-

ball would be

Unfortunately, the terrain is a

big part of the

game, but all 18

need to be ani-

mated at once. There's one ball

to track, and

each of the nine

players

my

favorite.

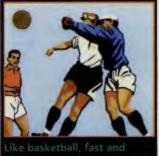
don't

The list goes on - soccer, hockey... but not football. Football is one



of the most popular sports on the planet, but I'm afraid it wouldn't work well in this format. You find me ten guys who want to play linemen, and I'll change my mind.

That's my story and I'm sticking to it. See you next issue!





What we need next in the gaming

The Gate Keeper



ADVENTURE GAMING COMMENTARY

BY ANDY BACKER

Some of us tell stories, while others listen. Some play games, while others invent them. And of course, some people are visionaries, while others are...well, glad that visionaries exist.

THE ROAD AHEAD AND

Visionaries aren't content with the way things are. They prefer to push the envelope whenever and wherever possible. They march to a different beat and invoke change even when it may be

ill-advised. In fact, computer-gaming visionaries are even reinventing the way we perceive literature — and that's a tall order.

Because of visionaries and the ever-expanding computer technology made available to them, adventure games have slowly evolved into the multimedia format they now comfortably call home. Multimedia is a new way of experiencing stories — this, however, doesn't mean we should cast our books into bonfires. Multimedia doesn't replace movies nor can it supplant television. It's an entirely new medium that uses print, film, graphics, sound and computer technology to tell what we refer to as an "interactive story."

Since there are no precedents set, there are, as yet, no rules to follow. In fact, the medium — from designer to designer — is perceived as a different experience. It began some years ago with interactive text and some meager computerized sound effects. Eventually, another designer incorporated some graphics, while another added music; another animated the graphics, while still another improved on the sound quality. Someone began filming actors, while someone else created interactive film clips. Finally, someone else combined everything into a cohesive package and placed it on a CD-ROM.

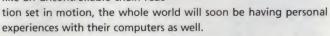
Throughout, the only underlying constant involved consumer participation: players had to make choices. Movies, books and television never actually allowed their audiences to interact with the story and, therefore, they have remained two-dimensional media. Gamers, on the other hand, could influence a story's plot and turn the whole process into a rich, interactive experience.

You, the reader, like it or not, belong to a privileged minority. Much of the world still hasn't been courted by the wonderful world of multimedia. It still remains a secret of sorts, which sometimes can be unlocked only at prohibitive cost. Of course, it won't always remain one. Your kids, for one, are spreading the news like wildfire, telling other kids the marvels of interactive storytelling. And kids, always receptive to wondrous new concepts, eventually

confide in their parents.

Before you know it, multimedia won't just be our thing any longer; it'll be theirs, too.

Millions will be wooed over and, like an uncontrollable chain reac-



And all because some of us are considered "visionaries." Hehheh.

ROSE-COLORED GLASSES

What is "vision" and who exactly are these visionaries? Well, for one, George Bush didn't have it, but a fellow by the name of Steve Meretsky does, as do Sid Meier, D.W. Bradley, the Miller brothers, John Romero and Jordan Mechner.

"Vision" is the ability to see and affect the future. Visionaries are the game designers who have brought about multimedia. For example, Steve Meretsky has been pushing the gaming envelope since the early days, when interactive text was all that was plastered across a computer screen. Steve, in fact, created the Infocom adventure *Planetfall* (it moved me to tears ten years ago), and his latest mind-numbing, interactive adventure is *The Space Bar* (reviewed elsewhere this issue).

Sid Meier has worked history to his advantage, churning out a series of outstanding strategy games such as *Railroad Tycoon*, *Colonization*, *Pirates* and *Civilization*. Sid not only dabbles in history but writes it as well; his games consistently appear on the everlengthening timeline of computer gaming. A newsmaker every time he announces a new project, Sid has become the embodiment of strategy gaming.

At the other end of the spectrum, we have D. W. Bradley. Creator of the magnificent Wizardry VII: Crusaders of the Lost Savant role-playing game, Bradley (founder of Heuristic Park, his new developing company) is now hard at work on a new multicharacter RPG, which is tentatively scheduled for release in early 1998. For now, apart from saying that "it will knock your eyes out, and you'll be in role-playing heaven," Bradley's remained pretty mum on the subject. He has promised us a sneak preview when it's available in the fall, and we'll be more than happy to share it with you when it arrives.

The Miller brothers, Rand and Robyn, uncorked the genie's bottle several years back with their phenomenally successful adventure game Myst. Multimedia literature has never been the same since. I guessed that they were destined to achieve gaming immortality early on. I remember Manhole, their first programming effort based upon the Macintosh, and how well it was received. Nowadays, they're working on a sequel to Myst, called Riven, which will be populated with characters and should redefine the Myst-like adventure gaming genre.

John Romero is another visionary. One of the core designers of the action blockbusters *DOOM* and *Quake*, John has joined forces with Todd Hall and Tom Porter to forge Ion Storm Entertainment. Interviewed in our debut issue, John has indicated that he's toiling away on *Daikatana*, another first-person perspective shooter due



The Gorgon's Alliance was nearing release.

out by Christmas. According to John, it'll "have a real cool story with multiple characters in it." We hope so.

THIS IS YOUR LIFE

There have been other notable designers who have crafted and continue to create imaginative games, with the hope of pro-

pelling the gaming community farther along into the realm of multimedia. We'll cover the true standouts on a regular basis. Right now, though, Jordan Mechner represents this month's visionary at a glance. He's garnered much of his fame for *Prince of Persia*, a huge action/adventure extravaganza and has recently redeveloped *The Last Express* for Broderbund Software. If I had had the opportunity to review it for *CGE*, I would have highly recommended it.

Mechner describes the game as a spy story: "You're on a train. It's an enclosed space but it's moving. You've got a finite cast of characters [and] you can explore the train thoroughly....[W]hile the clock is ticking, the train is moving toward its destination." What makes *The Last Express* so especially compelling is the fact that it permits the player to thoroughly experience a ride on the Orient Express just before the outbreak of World War I. The train has been painstakingly researched down to every last brass fitting. The player can explore the entire train — even crawl out some of its windows and walk along the car roofs.

The train is rife with a collection of eccentrics and distinct personalities from all across Europe. Onboard are an Austrian spy, a

German arms dealer, Serbian revolutionaries, a Russian anarchist, a Russian nobleman and his daughter, French tourists, a wealthy eccentric, an English spy, a Turkish eunuch and even a few harem guardsmen. Each character goes about his or her business on an independent basis, even when you endeavor to determine what the hero should or should not do while attempting to piece together the story.

No matter where the player chooses to go, s/he will undoubtedly miss something happening elsewhere onboard. The player, quite cleverly, never really skips over any of the more important clues but, instead, just experiences the story in a different manner. This is a kinder, gentler adventure game than most. There are only a handful of items to locate.

During the interim segments, players must decide for themselves how to interrogate each of the passengers and how to utilize the clues they uncover.

Although it's a landmark product, some players are, nevertheless, reluctant to call it the best adventure game of the year. Many have claimed that *The Last Express* contains far fewer puzzles than many of the more traditional adventure titles. No matter, *The Last Express* is a very unique, impressive and innovative game, demonstrating anew why Jordan Mechner should be included amongst the industry's more significant visionaries.

MONTH IN REVIEW

Shadows Over Riva (reviewed last month) garnered a great deal of online role-playing messages, while the multiplayer version of Diablo continues to remain extremely popular. The Faery-Tale Adventure II: Hall Of The Dead has the look and feel of the original role-playing game that appeared on the Amiga way back in the '80s. The sequel shouldn't be vaporware for much longer!

Sierra's strategy/role-playing game Birthright: The Gorgon's Alliance is nearing release and, based upon an early sneak peak, it looks very good. Bullfrog finally released its long-awaited

strategy/action game, *Dungeon Keeper (DK)* [reviewed elsewhere in this issue]. Although billed as a role-playing game, *DK* is actually more of a strategy game, similar in many respects to the critically acclaimed *Populous* series. In a nutshell, the player competes against the computer or other players to build a set of hero-proof dungeons.

Shivers II continues to receive the majority of adventure game messages on the Internet, but that's perhaps due to the many complex puzzles gamers have had a difficult time deciphering. A

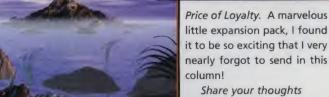
gold medal winner, *Shivers II* sadly does have a few warts, such as a weak story and a poorly acted endgame sequence.

Dungeon Keeper more than meets great expectations.

If you like your strategy games accompanied with a dash of role-playing, I suggest checking out *Heroes of Might and Magic II: The*



The Firebird is a powerful symbolin Jordan Mechner's The Last Express.



Heroes of Might and Magic II: The Price Of Loyalty is exciting.

Share your thoughts with Andy Backer by writing to him at andybacker@ aol.com or71202.3451@ compuserve.com. (M)

Under The Hood



HARDWARE COMMENTARY

BY TIM LIEBE



SINGIN' THE CONFLICT BLUES...

Take a look at the back of your PC and see how many general external devices, or "peripherals," you can hook up to it. You've probably got two serial ("COM") ports, one parallel ("LPT") port and a game/MIDI port.

Now, take a look at how many peripherals you've got hooked up to your PC. Unless you've got a PS/2 port for your mouse, the mouse is generally taking up COM 1 — your nine-pin serial port. The LPT port's taken up by your printer. Your game port's got some sort of game controller (joy-

stick, gamepad, steering wheel or flight yoke)

plugged into it.

You'll notice I didn't mention COM 2, your 25-pin serial port. That's because, if you've got an internal modem, it's probably already using COM 2's IRQ ("interrupt"). You can't have two peripherals sharing the same IRQs or DMAs at the same time; both devices will be ignored. While you could reset your modem's IRQ, most modems will only accept a few alternate settings.

If you've ever tried to hook an additional peripheral up to your PC with a setup like I just described (a pretty common one these days), you've probably ended up singing "The Conflict Blues." IRQ conflicts are the most common ones, though DMA (direct memory address) and game port conflicts are fairly frequent as well. DMA conflicts aren't that hard to fix, generally, since your PC has plenty of DMAs to go around.

IRQ conflicts can be a real pain, though. There are only 16 IRQs to go around, and your PC has already grabbed several of them. Any device, internal or external, that uses one of your computer's ISA slots (the 8- or 16-bit slots inside your PC that older sound, video, modem or SCSI adapter cards plug into) needs its own IRQ. As a result, a lot of PC users often run out of room to expand long before they run out of devices they need or want.

....And USa's Plug 'N' Play Solution

All that's about to change for PC users, though, thanks to something called the Universal Serial Bus (USB) connector port. Many desktop and laptop PCs which shipped in the past year or so have one or two USB ports built into them. These will permit you to connect up to 127 different USB-compatible peripherals to your personal computer, including keyboards, modems, joysticks, gamepads, digital speakers, microphones, mice, scanners, digital cameras, printers and even ISDN and digital PBX phone lines.

More significantly, you can connect all of these devices with little fuss or bother. Provided your PC has at least one USB port from which you can connect one peripheral, and the latest OEM version of the Windows 95 operating system (OSR 2.1), all you'll need is a USB "expansion hub device" to add more peripherals. All USB peripherals will use the same four-pin interface, so there's no sweating whether or not you've got a compatible port. Since the USB host controller puts out a 5-volt power supply, many peripherals will be able to use that for power instead of a bulky AC adapter. You won't even need to turn your computer off, because the operating system will be able to automatically recognize, configure and enable your peripherals. Best of all, the autoconfigure feature means you won't have to worry about system conflicts, because USB peripherals don't require separate IRQs to work.

USB accomplishes all this by utilizing PCI, as opposed to ISA, system architecture. However, just because your computer has a PCI chipset built into it doesn't mean you've automatically got USB capability. At present, your computer needs a USB-enabled motherboard before you can take advantage of the new technology.

USB can operate at two data rates — 12 megabits/second for peripherals like joysticks, modems, speakers and printers, and 1.5 megabits/second for slower devices like keyboards and mice. While not fast enough for high-speed devices like video displays, external hard drives or CD-ROMs over 6x, it's still faster than your current ISA ports are.

Because USB uses a specially designed four-pin interface, many of your current peripherals won't be able to jack in with their current plugs. However, because of the large number of users who own "legacy devices" (that is, peripherals that use ISA ports), PC manufacturers will continue to include parallel, serial and game ports for the time being. There are also third-party vendors working on "dongles" — adapters that'll allow you to use your legacy device with a USB port.

Timothy Liebe can be reached by e-mail at tliebe@cgentertain-ment.com, or by regular mail care of CGE.









The new Universal Serial Bus port and some of the 127 peripherals that can be attached through expansion hub devices, like compatible monitors and keyboards.

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today.



How We Rate the Games

Game ratings are determined based upon the compilation of a number of weighted sub-factors. Utilizing

a sliding scale (40 equaling the worst, 100 the best), awards can be garnered depending upon the overall score. Games attaining overall scores of 85 to 89 will earn themselves the coveted CGE Silver Star. Games scoring in the neighborhood of 90 to 94 are awarded the highly-acclaimed CGE Gold Star; and especially noteworthy games scoring 95 or better are pinned with our proudest decoration; the Computer Game Entertainment Platinum Star. We

evaluate each game and determine the scores based upon the following criteria:

OVERVIEW HITS: Extremely hilarious with excellent graphics and uniquely intuitive interface Ratings MISSES: Some of the voice-acting **Dollar Value** could stand a few more acting classes THE LAST WORD: For those who prefer to be Physical Components entertained over challenged, this is the funniest adventure game this year.

Furthermore, we augment the scores by explaining some of the nuances, both good and bad, that we uncovered in our review in the Overview. If anything specific needs commenting or highlighting, we'll state it here.

HITS: In plain English, we outline the best features of the game.

MISSES: We succintly discuss factors such as omissions, incomprehensible manuals, glitches, bugs, etc.

THE LAST WORD: Used in conjunction with our overall score, this represents our bottom line, noholds barred assessment of the product. If the score doesn't serve as a guide, then our final text-based assessment of the product should.

As you can see, our evaluations are all-encompassing, and attempt to discuss every relevant aspect of the game or peripheral product being reviewed. As product prices escalate and an ever greater number of products are released, we believe it is exceedingly important to provide you with the most detailed and timely analysis conceivable. We hope you appreciate our endeavors.

,**Dollar Value:** Was the game worth every cent you spent on it? vVeighted Range = 5 - 30

Playability: Some of the most critical factors of a game are held up and scrutinized. Is the interface intuitive, gameplay seamless, and Al challenging enough to warrant extended play or a trip back to the store shelf?

Weighted Range = 5 - 20

Originality: Does the game break new ground or simply trod where others have already trekked?

Weighted Range = 1 - 10

Graphics: Does the product contain state-of-the-art animation, high-quality artwork, and fully-rendered objects and background scenery?

Weighted Range = 5 - 20

Sound & Music: Are the accompanying soundtracks rich, dynamic and appropriate, or do they seem destined to reverberate in the average dentist's office? Are the ambient sound effects realistic or mood-setting? Will the rest of the family scream, "turn it down!"?

Weighted Range = 1 - 10

Physical Components: Is there a printed manual? If so, does it and any other ancillary documentation provide concise and detailed information on how to understand and play the game?

Weighted Range = 1 - 10

Overall Score: Numerically, the most important rating of the bunch. The overall score is arrived at by tallying up all of the scores in the previous categories.



Medium:

CD-ROM

Developer: Beam Software

Telephone: 714-553-6655

Supports: WIN 95

Publisher: Interplay

Website: www.interplay.com



Norse by Norsewest The Return of the Lost Vikings

by Steve Honeywell



IN THE ORIGINAL SAGA

of The Lost Vikings, the three Viking brothers - Erik the

Swift, Olaf the Stout and Baleog the Fierce - were captured by the evil alien Tomator. Eventually the three escaped and returned home to their accustomed Nordic lifestyle. Unfortunately, Tomator has returned. He's recaptured the trio, and thanks to a thoughtless act committed by the dimwitted Olaf, the Vikings are now traveling through time. Waylaid by Father Time and 32 increasingly difficult puzzles, their aim is to return to their beloved Scandinavian homeland.

Norse by Norsewest is the sequel to The Lost Vikings. While gameplay is for the most part unchanged, there have been some significant alterations. For instance, each of the Vikings now possess additional abilities. Erik is still able to run and jump, but because of his new helmet and rocket boots, he's now able to swim and jump extraordinary distances. Baleog has been outfitted with a laser sword

and a bionic arm that enables him to attack from afar, grab distant objects and swing from ceiling mounts. Olaf can shrink himself, which allows him sneak into uncomfortably tight quarters.

Moreover, two new characters have been added to the mix: Fang the Werewolf and Scorch the Dragon. Each of these characters has powers that, if used wisely, augment those of the Vikings. For instance, Fang can attack enemies much like Baleog, yet can jump like Erik. Fang is also capable of clinging to vertical surfaces. When taken in conjunction with his jumping ability, Fang can easily scale even the sheerest of walls. Scorch, on the other hand, is able to jump, fly and even breathe fire, making him a deadly ally.

During the course of play, players control only three characters in any one level. Therefore, they must optimize each charac-

ter's abilities and traits, while somehow downplaying his shortcomings. As an example, Erik can't attack despite his blinding speed. Olaf is slow and incapable of jumping; on the other hand, his shield can be used to protect him from his enemies or as a sort of hang glider, enabling him to float downward. Then there's Baleog, who can protect himself but, like Olaf, can't jump.

To complete each level, players must move all three of their characters to the exit. Players must also locate and obtain any number of items in order to access the exit portal. It's a daunting task, as there are many enemies populating each level of play. Each character can withstand only a few points of dam-

before dying. Should any of the characters die, then the level is for all intents and purposes over.

MINOR MISTAKES." Herein lies the rub. Ascending levels become more and more difficult, and in

time less forgiving of minor mistakes. Some puzzles require precisely timed responses, and it's this knack which turns Norse by Norsewest into a challenging (and often merciless) marriage of hand-eye coordination and thoughtful play. I can live with the emphasis on intensity - however, the game isn't all that much fun to play. Too much "busy work" is involved; a puzzle's solution, although sometimes readily apparent, frequently demands a steady hand to solve. At best, this becomes a frustrating affair, requiring repeated play to finish. At its worst, errors invariably prove fatal, requiring that the player



them to allow for another attempt at the level

restart each level.

It's difficult to label Norse by Norsewest a bad game, because it does contain some exemplary aspects. Unfortunately, it seems to be plagued by a series of poor or ill-conceived design choices which detract from play. Athough puzzle gamers may well be charmed by the cute graphics and excellent voice-overs. The taxing wedding of time consuming puzzles and unforgiving gameplay mars an otherwise good product.

It's a real shame, because Norse by Norsewest could have been an entertaining (if somewhat goofy and cutesy) puzzle romp. Maybe we'll get lucky and Erik, Olaf and Baleog will stay lost until these problems are cleared up in the next iteration.

OVERVIEW

HITS: Good puzzles and voice-over work.

MISSES: Puzzles are often unforgiving, requiring the gamer replay a level several times to succeed.

THE LAST WORD

The Lost Vikings was a decent title, but did it really need a sequel?

Ratings	
Dollar Value	18
Playability	
Originality	6
Graphics	
Sound & Music	9
Physical Components	
OVERALL 6	1

"Ascending levels

become more difficult

and less forgiving of



Medium: CD-ROM
Developer: Midway
Telephone: 212-726-6500

Supports: WIN 95
Publisher: GT Interactive

Website: www.gtinteractive.com

War Gods

by Peter Suciu



BILLIONS OF YEARS AGO, an alien ore fell to Earth, and during the millennia that followed, ten humans were transformed into gods...and, for some unknown reason, these deities spend all of their time battling each other. At least that's

the thin premise that War Gods, a 3D fighting game, tries to present to the player as it makes the great leap from arcades to home PCs! Why these gods haven't banded together to take over the planet is something I'll never know. In truth, like most fighting games that should have been left in the arcade, why the characters fight is not important — it's just a given, an unrelievedly boring fact. Maybe if some developer could come up with a believably interesting premise, these games would be more compelling.

In all fairness, it should be noted that War Gods belongs to the next level of evolution in fighting games — a genre that has moved away from side-scrolling action and now concentrates on true-to-life 3D thrills. It is this stunningly rich 3D addition that has given fighting games a new lease on life. Without its advent, even Beavis and Butthead-types would have become bored by the genre.

War Gods provides a stylish setting, and it looks good - damn good, perhaps as good as the arcade version. But just when things seem fine enough, some truly lamebrained characters show up and decide to brawl nonstop. In truth, some of these comic book-inspired anti-heroes are potentially interesting; the player, however, never really learns, onscreen, how and why these characters became immortals and achieved their godlike power. Even the manual is lacking on this account. Of the ten gods, the more appealing are the Egyptian god Anubis, a cyborg called Cy-5 and the Roman gladiator Maximus; as for the rest, they look like clownish rejects from a cooler game. The worst are represented by a samurai, called Kabuki Jo (who looks more like Bozo Jones), and Vallah, a warrior princess whose attire is à la leather-and-lace shop! These insipid gods. as well the battlefield background animations that they occupy, are richly rendered; their movements during combat are, at times, realistically fluid. But as with all fighting games, if you blink too fast, the action's over. The game endeavors endow its characters with

their own unique look and personality; even so, it's doubtful that any player would care to bond with any of these losers.

Here, as in similar games, it's the computer that makes the moves (throws punches and kicks and executes other special attacks) that no human player could ever pull off even in full cheat mode! The range of controls is extremely limited: basically, the player can try to kick and/or punch his or her opponents high or low while blocking similar attacks. Really cool moves that combine actions include: uppercuts, leg sweeps and throwing off opponents — but these are difficult with a gamepad and almost impossible to perform with a keyboard! Mastering the game is pretty easy, but the computer can still decide to cheat at anytime.

In War Gods, there's no real advantage to choosing one character over another. They all have their own fighting style and set of special moves; some are stronger or faster. But since the combat involves only extremely limited attack options, the player is not able to take advantage of these unique character capabilities. Gameplay could be dramatically improved if, when certain characters are selected, the opponent could laugh hysterically or run off, horrified by the charac-



ter's ridiculous costume!

The sound effects and background music are genre-typical, sounding much like B-movie soundtrack leftovers. At times the sound was far from in-synch with the action — but actually, this made the game more enjoyable. Far from being the last word in fighting games, War Gods doesn't bring anything new to the fighting-game table. All it does is make a weak attempt at presenting something resembling a story-line. Visually, the game is almost a winner, with pleasant backgrounds that look good and fluid movement; but as soon as the characters come onscreen, the game slides downhill big-time.

OVERVIEW

HITS: Decent 3D graphics. As good as the arcade version.

MISSES: Gets old really fast! Silly, boring premise.

THE LAST WORD:
Great for those who

Great for those who spent a small fortune on a PC and want to waste their time playing fighting games!

Ratings	
Dollar Value	8
Playability	10
Originality	2
Graphics	8
Sound & Music	3
Physical Components	1 5
OVERALL	16

REVIEW

Medium: CD-ROM
Developer: Blue Byte
Telephone: 847-995-9951

Supports: DOS
Publisher: Blue Byte

Website: www.bluebyte.com

Extreme Assault

by Robert Mayer



BLUE BYTE
Software is perhaps Germany's
leading game
developer, one
of only a handful of European
companies to
have carved out

a niche in the US game market. While not commanding the same level of esteem as, say, Bullfrog, Blue Byte has, nonetheless, developed a name for itself: forerunners include the Battle Isle series, Serf City, Settlers II, Albion and Archimedean Dynasty. With Extreme Assault, Blue Byte serves up another action shooter, this time employing a futuristic helicopter and tank to wreak havoc and commit mayhem.

Extreme Assault's greatest draw is its graphics. They're absolutely stunning, and on a high-end machine — 200Mhz with an MMX upgrade — the game is as gorgeous

to behold as any similar action title. In fact, the cockpit views are spectacular, enough to warrant stopping gameplay to fully admire them. The buildings look fantastic; vehicles and weapons superbly rendered. The atmospheric and environmental effects are

equal to some of the cutscenes found in many of today's games. Amazingly, these visuals don't require funky 3D accelerator hardware to properly pull off. Although the game will make use of MMX technology, all that's really needed is a moderately fast (90Mhz) Pentium equipped with local-bus SVGA to lasso you in.

Of course, all of this splendor does come with a price. The playing area for each mission (there are dozens, spread across six environments) is rather small, and the game sometimes seems akin to a knife fight taking place in a phone booth. The relatively diminutive combat arenas means strategy and tactics take a backseat to good reflexes and a lightning-quick trigger finger. To be fair, this is billed as an

action game, not a simulation, and such attributes are to be expected rather than condemned.

The plot line is muddled and incomprehensible but easily dispensed with once play begins. Essentially, it all boils down to fast-paced combat centered upon a mythical Sioux AH-23 chopper and T1 battle tank. Oddly, players interface with either piece of equipment using only one control setup. A strange design constraint, both weapons platforms are, nevertheless, relatively easy to control once the action heats up.

Another curious item: Blue Byte, for some reason, supports a very limited number of controllers, ranging from a "plain vanilla" joystick to the Thrustmaster and compatible hardware. Sophisticated sticks from CH

Products and Microsoft get shortchanged, since their coolie hats and extra buttons are only nominally supported. Fortunately, there are several predefined control setups available — including one that mimics a flight simula-

tor — and everything is fully customizable.

Extreme Assault possesses all of the requisite elements of the modern-era arcade shooters. Mission briefings unfold via a simulated video feed relayed to the player's cockpit. While the voice acting may seem a tad overdone, the atmosphere is grand — simulated interference periodically disrupting transmissions. Bad guys conveniently leave power-ups when they expire, which, as you've probably guessed, leads to receiving upgraded cannons, more potent missiles and even recharges a crafts shields. Power-ups aren't something to be trifled with; there are lots of nasty missions and several nightmarish foes. The missions are more or less self-contained, but, in a curious twist, damage and power-ups carry



over into the next mission.

Sound is good, the mission briefings informative in a somewhat over-the-top manner and pacing as well as difficulty ratings seem well-balanced. If solo play starts to become a drag, players can always turn their attention to net play, choosing to duke it out with other players over an IPX network or via the Internet.

All in all, Extreme Assault delivers what it so boldly promises: high-color, high-energy action set in a magnificently rendered game world. It's not overly complicated, and far from involving; Extreme Assault, though, is a straight-forward battle of brawn over brains, and a good one at that. Blue Byte should be heartily commended.

OVERVIEW

HITS: Graphics, action, speed.

MISSES: Controls are quirky, insufficient joystick support, and nothing terribly original when it comes to gameplay.

THE LAST WORDS

A great way to show off MMX technology at its finest.

Ratings	
Dollar Value	25
Playability	18
Originality	
Graphics	20
Sound & Music	10
Physical Components	
OVERALI 8	5



REVIEW

Medium: CD-RC

Developer: Xatrix Entertainment

Telephone: (714) 553-6655

Supports: DOS 5.0 or Later

Publisher: Interplay

Website: www.interplay.com

Redneck Rampage

by Steve Honeywell



MOST 3D shooters require that the player run around and kill every alien in sight. While not an altogether unsavory scenario, the

action typically occurs on the aliens' homeworld or amidst a war-torn cityscape. Now, as everyone knows, this runs contrary to common belief; everyone knows that alien spaceships land in the middle of nowhere — to abduct hapless country folk or harass residents of trailer parks!

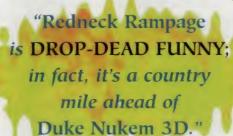
Best termed as a kissin' cousin of *Duke Nukem 3D*, *Redneck Rampage* is drop-dead funny; in fact, it's easily a country mile ahead of *Duke*. At best, the humor is mildly off-color and, at worst, can be viewed as downright offensive to some people. If you're the sensitive type, consider yourself forewarned.

Created by using the Build engine developed by 3D Realms, Redneck Rampage is as short on plot as it is long on gameplay. Leonard and Bubba, two rednecks from the deep woods of Hickston, AR, have witnessed Bessie, their prize-winning pig, being abducted by aliens. Leonard has to blast through a series of weird game levels to retrieve the swine. Bubba more or less serves as a simple icon; players must smash him in the head with a crowbar to end the current level.

The major difference between Redneck

Rampage and other games of this genre comes with the weaponry and enemies. The weapons inventory is varied and extremely well-developed. The player begins the game armed with a crowbar (for close-up head mashin') and a very powerful pistol that requires reloading every six shots. Other weapons in the arsenal are a double-barreled shotgun - great for waxing nearby enemies, but virtually useless from greater distances; a highpowered full-auto rifle;

dynamite which can be thrown or launched from a crossbow; a buzzsaw launcher that shoots dangerous, spinning



blades; a severed arm of the alien Hulks; powder kegs and an impressive (and surprisingly comfortable) alien Vixen bra-

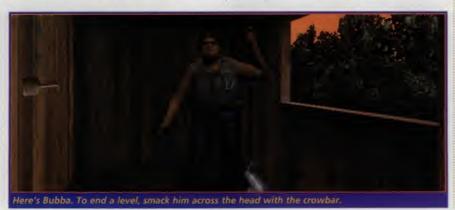


Turd minions are more annoying than dangerous. Just be happy the game isn't scratch 'n' sniff.

mounted twin machine gun. Although each weapon was designed for an expressed purpose, pistols end up becoming the most versatile weapon even during the final levels, since they're accurate even at long range, fire quickly and can be replenished quite readily throughout the game.

The enemies and other assorted characters in the game are equally diverse. For instance, running into chickens seems to be a recurring theme, since they populate every area in the game. More of a nuisance than anything else, their incessant pecking does cause some minor damage to Leonard. Although players can take the time to eliminate them, they can for the most part just as easily leave them alone. Pigs, also a common occurrence, will refrain from attacking Leonard unless they're attacked first.

It also appears as if the aliens dabble in cloning. Doubles for town drunk Billy Ray Jeeter and a crazy old coot run around, spouting half-witted remarks and then some. For instance, the "coot-clones" pack a pistol, yelling and screaming, "Git off mah land!" at every opportunity. While not to be trifled with, the coots pale in comparison to Billy Ray's clones. They're armed with more lethal shotguns, are quite accurate and just as tough to kill. Oftentimes



the player must fire off a full pistol clip to wax 'em.

Gigantic mosquitoes, roughly the size of volleyballs, flitter about the garbage-strewn areas of the game. Although they don't cause a lot of damage and attack rather infrequently, they dart around in haphazard fashion, making them tough to track and kill.

More dangerous threats do exist. Rabid pit bulls, for example, require a lot of shooting to properly put down. Alien Hulks absorb more damage than any other enemy, while exotic and alluring Vixens live up to their dominatrix-like billing by

stuffing their bras with machine guns. There are turd minions created from alien waste material and clones of the sheriff outfitted with a highly accurate pair of pistols.

What makes Redneck
Rampage such an exceptional
title is the amount of detail that went into
every facet of the game. Each level is wonderfully detailed, containing tons of
destructible terrain. The manual is both
well-written and humorous, containing
everything there is to know about the
game. Designed to resemble a small-town
newspaper, the manual contains pages
upon pages of absurdly funny stories and





of eight songs performed by four separate bands: Mojo Nixon, The Beat Farmers,

The Reverend Horton Heat and Cement Pond. There're some great songs here, such as the foot-stomping UFOs, Big Rigs and BBQ, Baby's Liquored Up, Nurture My Pig and Wigglestick.

The faint of heart should steer clear of Redneck Rampage. Not only does it contain all of the blood-and-guts splattering action contained in games like Duke Nukem 3D, but there's a significant amount of foul language as well. It seems that Leonard and his cast of songwriters express themselves with a litany of cuss words and other fairly colorful metaphors.

Another reason younger gamers may want to avoid Redneck is the frequent references to alcohol. For instance, Leonard can heal himself by eating or drinking. Although eating raises his "gut" level, Leonard can also replenish his vim and vigor by drinking beer or whiskey. Drink too much, though, and Leonard turns into a loud-mouthed stinking drunk. If he has too much booze in his system, Leonard becomes impossible to control, his gait devolving into a drunken stagger. Character rejuvenation becomes a tenuous science, since alcoholic power-ups cause weird side effects to occur. Eating, on the other hand, reduces Leonard's bloodalcohol content. Keeping him in tip-top shape means players must strike up a balance between imbuing their character with bad food and cheap alcohol. An intelligent change of pace, but not necessarily a wholesome attitude most kids will appreciate.

Game levels are spacious, expressly designed to provide nonlinear play aspects. If the player stumbles upon a particularly difficult area, they can step back and approach the area from an entirely

different direction. Ammunition appears to have been carefully allocated and apportioned throughout each level, with players receiving a decent supply of ammo and health for accomplishing various goals or clearing certain areas. If anything, the game errs on the side of generosity, particularly with pistol cartridges. Most players will rapidly max out and rarely sink below the 150-shell capacity. However, obtaining other ammunition is much harder to achieve. The levels themselves are different and distinct; for instance, it's impossible to confuse Lumberland with the junkyard. Some of the more interesting sites are the drive-in theater and J. Cluck's Poultry Processing Plant (home of the world-famous cream-filled chicken eclair!).

3D shooters shine when the game is fun and challenging, no matter if the gamer plays under multiplayer or single player conditions. Redneck Rampage ably fills the bill on both counts. Gamers slinging lead at each other over a network or the Internet will find the action to be as intense as any other multiplayer shooter, and a lot more humorous to boot. In single player mode, players will find the game equally as challenging and fun to play. In short, Redneck Rampage hits the bullseye on every conceivable count.

OVERVIEW

HITS: Great gameplay, killer music and funny as heck!

MISSES: Possibly offensive to a lot of people, requires dropping to DOS to play.

THE LAST WORD

If you don't take yourself too seriously, this is more fun than a tub o' grits.

Ratings	
Dollar Value	28
Playability	19
Originality	6
Graphics	17
Sound & Music	10
Physical Components	
OVERALI 8	9



REVIEW

Medium: CD-ROM
Developer: SCI

Telephone: 714-553-6655

Supports: WIN 95
Publisher: Interplay

Website: www.interplay.com

Carmageddon

by Peter Suciu



TIRED OF RACECAR GAMES? Tired of spinning those wheels around the same course over and over? How many times would it have been nice to turn

the car around and mow someone down? Had a bad day at work and wanted to run over the boss? Well, now there are two solutions — 1: Go out and get in the car and run down some poor losers. 2 the more fun and legal solution): Run out and pick up Carmageddon!

It's a strange B-movielike game, where players are high-speed racing demons, running into each other and everything that moves. Why are all these pedestrians even near the racecourse if they know that they are potential targets? Who knows, who cares? Did anyone really question *Death Race 2000*? No, it was mindless fun — and what fun it was! *Carmageddon* is like that classic B-movie (the one that launched Stallone's action career) meets *The Need For Speed!* The plot is pointless, but that doesn't slow down the action.

Players are cast in the role of a racer, ranked 99 - but with promise. Start out with a rather lame and wimpy car, and try to survive the first couple of races. As in good racecar games, a player can stay in the action by passing checkpoints and earning more time. But even the manual says that's the boring way to do it. The fun way is to just drive anywhere and everywhere and run over people and into the competition - both earn points and time. The race ends when the player runs out of time, completes the race (again, this is the boring way to end the race), runs over every pedestrian or when all the competition is knocked out!

Sounds simple enough, because it is. The real trick is making sure that the computer-controlled psychopaths don't smash up the player's car in the process. Experienced drivers will learn quickly how to avoid these insane idiots and smash them



up. This is one game where there are no innocents. In a maniacal fashion, the computer rewards players not for just the number of people hit but also for the style in which it was done. Jumping over a curb and splattering two people will earn extra points, as will spinning out and launching

lot stuff coming through!

an old lady into the air. As I've already griped, why these people are even near the racecourse is never explained. But to give the simulated morons credit, they do attempt to run for cover pretty quick.

As players win races — or at least survive — they advance (in typical racing style)

to the better cars and harder courses. Unlike other race simulations, the cars show damage from head-on collisions and other crashes. Careful players will avoid smashing the car up too early so as not to end up sitting out the race and plain looking stupid! But fear not - a quick hit of the backspace key and the damage is released as quickly as one can yell, "Her name is Christine!" The computer automatically deducts points earned from smashing the opponents and running over people from the player's score to pay for the on-the-fly repairs. If a player should happen to flip a car early in the race, s/he can even make a quick payment to get "unstuck!" As damages occur, the car's driveability wanes - steering becomes harder to control and the engine burns oil, creating a nice dark smoke screen to distract the driver/player. Even hitting people causes some damage. Use the backspace as often as possible to stay in the thick of it.

What makes Carmaggedon really stand out from other racing games is its detail; the designers have created excellent courses and alternate routes for the players to explore. And the settings vary from open roads to crowded city spaces, offering drivers some variety. All the settings, however, are rendered in a flat-looking style: walls, buildings, and even mountains pop up only as players approach. At high speeds, this gets dangerous.

Overall, Carmaggedon looks decent, but it isn't forging any new territory in racecar simulations. The graphics are good — good but not great; the display is somewhat grainy and the frame rate could be a little better. Players are recommended to have lots of memory and to do a full install for peak performance. Expect to see a fair share of blood fly through the air. With the damage showing up and smoke blowing from under the hood, the game becomes even more intense.

The sound effects are solid, while the limited use of music is not overly memorable. The voice-over work is humorous. The language is harsh, but then again anyone who buys a game where the point is to run over people (and cows) should expect a little swearing. The sound effects are also funny, filled as they are with typical crash sounds, engine roars and the squishing of run-over bodies!

Controlling Carmaggedon can prove somewhat awkward at first, but players can custom the settings. Driving the car is controlled with by keypad numbers (8 to go forward, 2 to brake, 2 and 4 to steer); other keys serve specialized purposes. Players are able to toggle between external views of



the car and a cockpit view. It's even possible to look right or left from the cockpit view. In addition, players can replay and watch the action from various camera angles. This game, solo, would get boring pretty quick, so of course there is a network option so that players can smash up each other and mow down pedestrians together.

The game's theme of running over things gets stale after a while, but so does driving around a course for hours. Carmaggedon wins points because it's so campy and silly about the whole thing. The developers clearly didn't take the game too seriously,

and that's what makes it so original and so much fun.

OVERVIEW

HITS: Great stress reliever. Fast and violent!

MISSES: Grainy graphics, demanding system requirements.

THE LAST WORD

Excellent game for sociopaths and those looking for new driver thrills.

Ratings	
Dollar Value	26
Playability	18
Originality	8
Graphics	13
Sound & Music	8
Physical Components	
OVERALL	30



REVIEW

"Whatever you paid,

it was too much."

Medium: CD-ROM
Developer: Gremlin
Telephone: 800-468-3775

Supports: DOS, WIN 95
Publisher: Interplay

Website: www.interplay.com

Reloaded

by Robert Mayer



ACTION GAMES are one of the staples of computer gaming. Even though consoles and arcades still reign

supreme in this field, the personal computer has become a legitimate contender in all aspects of action gaming. In some areas, like 3D first-person shooters, the PC has virtually defined the genre and remains the preeminent platform. The last few years has seen a veritable explosion of action-oriented games for DOS, Windows, and even Mac operating systems, thanks largely to the proliferation of high-performance computers with gobs of memory and fancy high-resolution graphics support. Action games have proven to be quite popular with gamers, and competition in this genre is intense. All the more reason to be baf-

fled at Reloaded, a Gremlin Interactive game published by Interplay Productions. At a time when even superb games like Origin's Crusader

series go from full-price to bargain bins in a few short months, the release of Reloaded seems a sure-fire way to drive the corporate books into the red.

First, the basics. Reloaded is a single or two-player scrolling action game with an isometric zoomable viewpoint. It supports keyboard or joystick control, redefinable keys, and two-player mode, with both players using the same keyboard with different control setups. So what's the problem? It is not done very well, and it is not fun. The graphics, while occasionally colorful, are unspectacular even in SVGA. Unless the view is completely zoomed out, characters and enemies are horribly blocky and indistinct; at minimum zoom, the characters are acceptable looking but rather tiny. Performance in SVGA (VGA mode is heartily not recommended for anyone with any aesthetic sense) is clunky even on a 200 Mhz machine, with the speed hits particularly noticeable at lower zoom settings.

Controlling the protagonist in this shooter is an exercise in stress management with the joystick and futility with the keyboard. Using the keyboard, you have to press two direction keys at once to move or fire on the diagonal (firing, of course, mandates yet a third key press and is virtually impossible to master.) Joystick control is better, passable even, but movement is still basically limited to eight directions; there is no facility to rotate in place or to

use the mouse for anything at all.

OK, OK, you're saying, so it has some rough edges.... What about the game, man? Well, Reloaded is ostensibly

the seguel to what the box copy calls "best action game of 1995." Funny, no one I know has ever heard of Loaded, but I suppose it is possible that someone, somewhere, named it to a "Best of" list. Anyhow, there is a back story involving some evil critter named C.H.E.B., a bunch of nasty characters framed for crimes that they may or may not have actually committed and a promise (largely unfulfilled) of massive gore and carnage. None of it makes much sense, but that really is not a requirement for a good action blaster. Basically, you move your character about the map, shooting everything and anything in your path, gathering power-ups and saving after every level. Along the way, various and assorted bad guys ranging from soldiers to mutants, to police and police dogs - attempt to bar your way. Smart bombs, special attacks and various combat enhancers help you plow your way through the crowds. Nothing new



Mamma teaches the military a valuable lesson: Don't let psychopaths onto military bases, if anyone's watching.

here, just standard arcade conventions. Someone who fell asleep in an arcade circa 1986 and just woke up would feel quite at home with *Reloaded*.

All of this, again, is perfectly fine, if it is done well. Unfortunately, even the gameplay in Reloaded is afflicted with the same spirit of ineptitude that characterizes its technical implementation. There are arcade-like lives and "continues" - a maximum of three and five, respectively, which of course means that most gamers are going to repeat levels ad nauseam. Levels are relatively small and unimaginative and usually solvable simply by blasting anything that moves (or shoots). The bad guys have no discernible intelligence and make themselves dangerous merely by swarming, which means having a good supply of smart bombs is much more important than actual skill. Trees, lamp posts and the like provide some obstacles, but the collision detection is primitive, and these battlefield objects prove to be more of a hindrance than a help — usually hanging up your character as you try to dodge around that last pixel that seems caught in your undies. Most of all, though, the game is boring. There is no sense of adventure, no sense of whiteknuckle, sweaty action that games like Crusader, Tomb Raider, MDK or even Firefight



provide. This is arcade tedium. Reloaded is very reminiscent of games that filled the arcades some ten years ago. It is also very similar to the types of action games that proliferated on machines like the Com-

almost worth watching

modore 64, except that in those days, programmers had more excuses for the sorts of flaws evident in this game.

Another issue with *Reloaded*: there is the explicit promise of extreme, excessive, grotesque violence and bloody carnage. The capsule bios of the player characters

dwell on the horrible crimes these denizens of the arcade universe are supposed to have committed and on their penchant for blood. The box promises "...the most deranged, psychologically brutal, senselessly violent, over-the-top,

insane blood bath created." Trouble is, it

head in Blood; I have chortled at the immolation of WEC guards in Crusader: No Remorse, and I thought the explosions and sheer devastation were the best parts of Syndicate Wars. But if you are going to promise blood, deliver it. Reloaded misfires here, big time. The bad guys in the game disappear and leave small red blotches behind.

That's it. The graphics sim- should be obvious

ply are not good enough or detailed enough to be gory.

it's ugly, but so is the rest of the game.

What is more, there is no sense of violence or even combat in the game. The "thrashing soundtrack" that is supposed to send you "into a homicidal rage" is lame in the extreme — fire up Quake for some Nine Inch Nails or, better yet, dig out your copy of Metallica's Kill 'Em All if you want some real slasher-thrasher tunes.

The enemies have no personality and hence carry no psychological weight. Shooting them is not even really killing, just pixel blasting, and about as involving. A close-up shotgun kill in *Outlaws* online is a lot more violent and impressive than anything in *Reloaded*, and *Outlaws* has very little blood at all. This is one game where someone must have had to slip the rat-

ings board a bribe to actually get a mature audiences rating; it wouldn't scare a two year old. The box screams "Uncensored, Uncut!," but yeah, so was Heidi, and that didn't give me nightmares, either.

There is more, but why bother? It should be obvious by now that the box

copy claim of "insane death machinery" really refers to pedestrian (and virtually indistinquishable) varieties of standard arcade weapons. The sticker on the box that covers up the planned but now absent modem and network support should cause you no surprise, either. There is, at least, a paper manual in the CD jewel box, but it contains little that is not immediately evident from the setup screens. Face it, Interplay is a great company, with

some great products, but this is not one of them. Gremlin Interactive has done a lot better work as well, leaving one to wonder why *Reloaded* ever saw the light of day. No matter: forewarned is forearmed, and now you know. For \$30 you can get both *Crusader* games and have a hell of a lot better time.

Lots of high-color explosions can't mask the hollowness of the gameolay.

ain't so. I am not at all adverse to gore in games. I love the splattering gibs that accompany a great rocket strike in *Quake*, or playing zombie soccer with a severed

OVERVIEW

HITS

The CD makes a great coaster.

MISSES

Concept, execution, interface, appearance, content.

THE LAST WORD





REVIEW

Medium: CD-ROM
Developer: Psygnosis
Telephone: 415-655-5683

Supports: WIN 95
Publisher: Psygnosis

Website: www.psygnosis.com

Wipeout XL

by Tom 'KC' Basham



IT'S THE FUTURE (isn't it always?). Specifically, it's the year 2097. As explained in the first *Wipeout* game (set in 2052), anti-gravity technology

has revolutionized the future. It's not the promise of high-efficiency mass transport systems, the allure of weightless aircraft, nor even the promise of lifting heavy payloads into orbit that makes anti-gravity the fad of the future. No, it's auto racing that propels anti-gravity technology into the limelight.

Wipeout XL is an arcade-style driving game in which players steer their antigravity vehicles through a series of tracks, picking up weapons and power-ups while avoiding mines dropped from opposing vehicles. What's that? Weapons and mines? Yes, in this version of the future, racing is an aggressive and downright violent sport. It's not enough to rely merely on driving skills — mines, rockets missiles, Electro Bolts, Thunder Bombs, Plasma Bolts, and even Quake Disrupters provide that extra edge needed to win the race.

Wipeout XL for Windows 95 is a fairly straightforward product. Players race around eight tracks, two of which are hidden, against as many as 14 anti-gravity vehicles. Four different racing classes, one of which is hidden, provide varying levels of difficulty with easier classes operating at slower speeds. The 11 different weapons provide the obligatory combat aspect.

Gameplay is pretty simple — drive around as fast as you can and shoot anything that gets in front of you. As with most arcade-action driving games, the clock is running against you and eventually expires. Of course, reaching certain positions within the allotted interval results in extended time.

Each track has two modes of play: arcade and time trial. As the name implies, in time trial you're the only vehicle on the track, racing strictly against the clock. Arcade mode includes opponent vehicles and combat. If you manage to finish all

tracks in first place a more difficult mode, Arcade Challenge, becomes available. Tracks have varying scenery, including weather effects and pitch-black track sections.

So, what's new about XL? Psygnosis has tweaked the gameplay, adjusting collisions and adding more weapons, enemies and racing classes. A new "weapon activating system" dis-

tributes weapons and power-ups throughout the track based on your race position. Vehicles (both yours and your opponents') can now be completely eliminated from the race by sustaining too much damage. Fortunately, pit stops can keep a damaged vehicle in the race. Otherwise, in terms of gameplay, XL is basically the same game as the original Wipeout with a few tweaks and improvements here and there. According to producer Rob Francis, the PC version is identical in gameplay to the PlayStation version.

3D accelerator support is XL's main claim to fame. The program supports a variety of accelerator chipsets, including 3DFX, 3D Labs Permedia, Videologic Power VR, Rendition Verité, Matrox Mystique and ATI 3D Rage/Expression. Utilizing accelerator hardware, Psygnosis doubled the resolution from 320x240 (used on the PlayStation version) to 640x480 while providing various effects such as perspective correction and light sourcing. Interestingly, the program had options for 800x600 and 1024x768 resolutions, although they were not operational in this pre-release version.

On the downside, each racing class is restricted to two tracks. The press release cites eight tracks and four classes (counting the hidden levels). I initially assumed I



could play any of the eight tracks on any of the four levels — driving the slower vehicles, for example, on the harder tracks. Unfortunately, this doesn't appear possible.

In general, Wipeout XL is an enjoyable enough game. Although mastering the higher classes will take some practice, for the most part XL provides quick entertainment without a massive learning curve. I wouldn't recommend playing the game with the keyboard, though, as vehicles seemed prone to PIO (Pilot Involved Oscillation, formerly known as Pilot Induced Oscillation). The vehicles seemed much easier to control when using either the mouse or the joystick.

OVERVIEW

HITS: Hi-res graphics.

MISSES: Limited number of tracks.

THE LAST WORD:

Wipeout isn't a bad game, but it's not a great game either. A few dozen more tracks and the ability to play any track at any difficulty level would improve this product.

Ratings	
Dollar Value	10
Playability	15
Originality	5
Graphics	15
Sound & Music	7
Physical Components	
overali 5	8

Medium: CD-ROM Developer: Psygnosis Telephone: (800) 438-7794 Supports: DOS & WIN 95 Publisher: Psygnosis

Website: www.psygnosis.com





Sentient

by Shane Mooney



I'VE SEEN A LOT of sad games in my day, but few have begun on such a potentially high note and turned

out to be such a disappointment. Sentient's marketing hype would have you believe that the game is a thrilling sci-fi epic containing an unprecedented level of artificial intelligence. The game promises to represent the fusion between a 3D firstperson game and an in-depth role-playing title, featuring a multitude of endings. In theory, gamers should never reach the same conclusion twice when they play the game. In reality, it's doubtful they'll have the opportunity to find out because this title stinks.

Sentient's story is set on a solar-orbiting space station named Icarus. If you're up on your Greek mythology, you'll discover that the station's name is a portent of things to come. You're cast in the role of Garrit Sherova. a medical technician sent from Earth to investigate a widespread case of radiation sickness occurring on Icarus. Just as your transport arrives, a solar flare erupts on the sun's surface. As fate would have it, this causes your ship to crash-land into the docking bay. From there on in, it's up to you to determine the course of events.

The game contains all the plot-driven intensity and disturbing circumstances a player could ask for - politically based power struggles, an assassination plot, ecological hazards, and even (of all things) an identity crisis. As the game unfolds, the player will find out that things aren't what they originally appeared to

Sentient does its best to provide nonlinear gameplay. The consequences of conversations and game-related decisions invariably create different situations and events. Since there's no conclusive ending, players will

continually discover that there are new ways to handle each situation. Players

must interact with the more than 60 characters portrayed in the game and become familiar with each of their traits and idiosyncrasies to know how to deal with them properly.

There are six major plots contained in the game. In one, the chief medical officer requests that you help him investigate the outbreak of radiation sickness. In another, you're captured by Security and swiftly discover that they plan to use you in one of their experiments. Various subplots are intertwined throughout the saga, setting the stage for what could have been a very intriguing adventure. Moreover, there are

> lots of puzzles to decipher, as well as interactive elements and conversations to unravel.

So what's wrong? To be blunt, the gameplay falls flat on its face. The graphics look vaguely reminiscent of my old Commodore 64, even when running the game on a 200MHz Pentium with an MMX installed. Originally designed as a PlayStation title, the graphic conversion to PC was woefully understated. The blurred and sometimes fuzzy graphics are painfully rendered



and left me wondering on occasion what I was looking at. Sound is equally dismal, rising to acceptability only during the introductory sequence.

Dialogue between characters is placed inside comic book-style bubbles. Even the player character's thoughts are portrayed this way. This clumsy technique might have passed muster if it were not for the cheesy, overdrawn dialogue.

In the end, Sentient requires too much work to fully enjoy. Working with what could have been a wonderful concept, Sentient not only dropped the ball during the execution phase but fumbled it from the get-go.

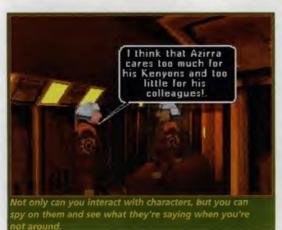
OVERVIEW

HITS: Nonlinear game play with unique characters and intriguing sub-plots.

MISSES: Poor graphics, top-heavy system requirements, and unbecoming dialogue.

LAST WORD: Despite an excellent premise and promising storyline, this game falls flat in too many areas.







Medium: CD-ROM Developer: Bullfrog Prod. Telephone: (512) 434-4357 Supports: DOS & WIN 95 Publisher: Origin/Electronic Arts

Website: www.origin.ea.com

Dungeon Keeper



IS THERE ANY-ONE LEFT in the gaming world who doesn't know that the monsters are the good guys in Dungeon Keeper, a real-time strategy game that spoofs

fantasy role-playing? Because of a twoyear delayed release, a large amount of favorable pre-release hype and an innovative concept, it appeared destined to be a hit before anyone had a chance to review it. Now that it has finally been released, it seems that much of its pre-release hype was justified. Dungeon Keeper is the most innovative, comic and fun new strategy game on the block. It may even be good enough to garner a couple Game of the Year awards.

Still, not everyone may want to play it. Some will quarrel with the fuzzy graphics resolution, while others may find it too difficult to learn how to play. Although role-playing gamers will most appreciate this spoof of the genre, they may have lit-

tle interest in playing a strategy game. Dungeon Keeper has almost none of the features that would make it a true fantasy RPG. Although it looks like a dungeon crawler, has the same types of

fantasy heroes and monsters and even allows monsters to statistically improve with training and combat experience, it's primarily a capture-the-flag type, real-time strategy game, closer to Bullfrog's Populous series than anything else.

There is little story line. One can't create his or her own monsters, there aren't any individuals the player can identify with (only types) and, although the monsters have individual names, they must be possessed before the player knows them. There are no items to find and no puzzles to solve. What a player mostly does is build 30 different dungeons, one per level, and



"...a real-time strategy

GAME THAT SPOOFS

fantasy role-playing."

attack his or her opponents' dungeons. The winner is the player who destroys the heart of the others' dungeon.

The game begins with a terrific animated introduction. On a dark and stormy night, an armored hero stupidly confronts a group of card-playing monsters while music (similar to Beck's

Loser) rocks the sound-

track. The monsters are gorgeously squat, cunnin and ugly, whi hero appropriately tai. handsome

dumb. Since the monsters are the true heroes, the tall phony appropriately and literally loses his head, proving once again that evil and cunning will always overcome good and stupid.

After the introduction, players are taken to the game screen. Besides a Begin New Game button, Dungeon Keeper has several multiplayer options. It can be played computer-to-computer, modem-tomodem or on a network. There is even a single-player option for players without modems or access to networks - here the computer provides the opponents.

If the player punches the new game button, s/he is taken to a map of Dungeon Keep world. It has 30 levels, or "territories," to conquer (the first five are tutorials). A red flag appears on the map, the player clicks on the flag and is taken to that territory. It introduces basic mon-

sters, such as the beetle, who

only need one tile of lair. By the fifth tutorial the player has been introduced to most of the game's other monsters, including the Bile Demon which needs 25 tiles of

lair space. Dragons and Vampires are introduced in later levels.

The tutorials also instruct players on how to build a training room that increases experience levels when used, a library for researching spells and a workshop for manufacturing different types of traps and doors. The player may also construct prisons, torture chambers, bridges, guard posts, graveyards and scavenger rooms.

Of the several spells in the game, the most useful is Destroy Walls, which removes wall reinforcements, leaving the imps free to dig through into enemy dungeons. The most fun spell is Possess Creature. Whereas the player's view of the dungeon is normally top-down, so the player can better see and control all of the mon-

sters, Possess Creature allows the player to see the dungeon in first-person perspective. The player's view is that of the creature possessed. The player controls the creature and may move and do battle with it. The player can also choose different weapons or spells for the creature to use.

Possessing a creature gives *Dungeon Keeper* the look and feel of a single character role-playing game. Players will find it awkward to play that way for long periods, though,

as it limits their strategic decision-making ability. Remember, the action of the game is in real time, and the player must be free to rapidly scroll around the dungeon, making command decisions. S/he doesn't have much time for tactical maneuvering.

Dungeon Keeper is not easy to learn because it's complex, fast paced and has

interlude where the player sees a statistical breakdown of events that occurred on the level, heroes and monsters killed, etc. The player is scored and, if his or her score

is high enough, s/he is inducted into the Hall of

There are two ways of defeating the enemy in the tutorials. The first is to kill the invading overlord, who appears only after should mine gold veins.

The imps must first build a treasury, a lair and a hatchery before digging a portal. The portal is how monsters populate the player's dungeon. Each monster type is attracted to a different-sized lair, treasury and hatchery. They eat the chickens in the hatchery, sleep in their lairs and get paid from the treasury. The imps fill the treasury with the gold they dig up from the dungeon. If the treasury is empty, the whole dungeon construction process shuts down.

The graphics themselves are marvelous, though the default resolution renders



numerous features. Beginners are advised | he's fi

numerous features. Beginners are advised to spend several hours playing the tutorial levels and studying the game's 80-page manual before undertaking any multiplayer levels. The tutorials instruct the gamer how to build, populate and defend progressively larger and more complex dungeons, as well as how to attack their opponent's dungeons. Each tutorial is a complete game with tutorial-type commentary.

Every level includes some sort of strategic problem the player has to solve, as well as an enemy to be defeated, before s/he can move on. Between levels there's an he's first sent waves of his archers, knights and dwarves. The second is to attack and conquer the overlord's neighboring dungeon, particularly its heart (this alternative is not available until the later tutorials).

Every dungeon starts with a heart and a few imps. The imps can be directed to do all the building, either manually or with computer assistance. If the player chooses the aggressive type of assistance, the computer will automatically construct the dungeon, lay traps, cast spells and attack enemy players, leaving the player free to mostly watch and indicate where the imps

them fuzzy and pixilated. There's a higher resolution mode the player can choose, which improves things somewhat. All the monsters, heroes, rooms and objects are wonderfully drawn, and the animations are superior. Just about all the features in the game are superior — brilliantly produced, amusing and innovative. Dungeon Keeper will provide players with multiple hours of knock-'em-dead entertainment. It's something very different — a change of pace for strategy players who don't mind laughing at the fantasy role-playing genre.

OVERVIEW

HITS: The monsters-as-good-guys theme is innovative and amusing. The monsters are brilliantly drawn and animated. The dungeons are complex,

with each level providing additional surprises and strategy problems.

MISSES:

The graphics resolution is fuzzy. Some players may find its learning curve too steep.

LAST WORD:

A definite candidate for Game of the Year honors.





Medium: CD-ROM

Developer: Peter Sarrett
Telephone: (206) 649-9800

Supports: WIN 95

Publisher: Sierra On-line, Inc.
Website: www.sierra.com

Betrayal in Antara by Andy Backer

WITHOUT RAYMOND

E. Feist's storytelling magic, Betrayal in Antara, Sierra's sequel to its award-winning Betrayal at Krondor, sizzles rather than explodes.

There's not much heat in this low-key roleplaying adventure set in medieval times. Antara is a mere Fourth of July sparkler whereas, in Feist's literate hands, Krondor was a magnificent Roman Candle.

So what's wrong with Antara? For openers, there are too many words. Much of the dialogue badly needs cutting. Good writing is economical. Gamers should not be forced to read or listen to endless pages of pedestrian exposition and shallow attempts at developing character, especially while the game ignores visual rules. Movie and TV directors know that the camera can't remain on any one character for longer than eight seconds. That's about all the attention span a viewer has before a camera has to zoom, pan, or cut to another shot. Antara uses the same full-front slide of a character for all of his or her speeches, and it remains on screen each time until s/he has spoken each one in its entirety (seemingly for hours). Not only that, but the slides are all completely unanimated, without even a character's lips moving to break up the monotony!

Besides almost completely lacking animation, the game's graphics are dated. It's a *Krondor* clone. Sierra uses almost the same engine, with a few modifications, for





Antara that ran Krondor years ago. Happily, that engine relied on polygons to create mountains and hills, and those highly pixilated images have been replaced with more realistic scenery. The interface has also been somewhat improved. But, unfortunately, some of what was awkward and ugly in Krondor remains. The caves are still a graphic nightmare and monsters are still awkwardly frozen as they wait to ambush a party. Gamers forgave Krondor's glitches because Feist's story was so strong. Graph-

ically, Antara is in some ways an improvement over its predecessor, but few gamers will forgive its weak storyline and dull, talky heroes.

Antara is still pleasant enough to play and an interesting change of pace for role-playing games. It deals with more mundane and, therefore, more realistic medieval problems than those concerning the usual trolls and orcs. The gamer finds low-key adventures in every village. The problem in one may be a lack of healing herbs, while another may lack food because of a robbers' or pirates' blockade. Corrupt politicians might control a third, and in a fourth the brother of the groom loses the wedding rings. These low-key mini-adventures are brief, abundant, fun to solve and provide a texture missing in its main storyline.

Combat is entertaining. Antara still uses the same turn-based battle engine as Krondor, which places monsters and characters on a grid and allows the gamer a variety of commands for using magic, bow and arrow or a close combat weapon. Once instructed, the character is animated and obeys.

Beautiful, brooding skies and forests along with subtle sound effects and music provide scenic atmosphere, although there are still too many dead spots. One delightful surprise is that Inns and Taverns are sometimes populated with groups of citizens who love to sing bawdy songs. Most of the puzzles are life problems that need to be solved — usually quite easily.



There are some treasure chests randomly placed that require the gamer to solve frustrating riddles in order to open them. Fortunately, they can be ignored.

Overall, Betrayal In Antara is adequate but disappointing. It just doesn't provide any compelling reasons for gamers to rush out and buy it. It's worth a spin, certainly, but not at its present retail price of \$54.95.

OVERVIEW

HITS: The low-key mini-adventures are fun as well as combat.

MISSES:

It lacks the storytelling magic of Robert E. Feist.

LAST WORD:

The game is worth a spin, but not at its present price.

Ratings	
Dollar Value	24
Playability	16
Originality	
Graphic.	
Sound & Music	
Physical Components	
OVERALI,	9

Counterpoint.

A rebuttal to Betrayal in Antara review



by Steve Miles, Producer



hank you for giving us the opportunity to respond to your review! I've read it thoroughly and discovered something quite interesting

everything you mention as being a fault, I find to be a benefit!

You believed that Antara was inferior to Krondor due to the lack of Raymond Feist's fabulous writing. But that's kind of like saying that Men in Black wasn't as good as Terminator 2 because Harrison Ford wasn't in it. Raymond Feist didn't write Betrayal at Krondor — it was scripted by a Sierra in-house author, as was Antara.

Another thing to note is that Antara's engine is completely new, not a rehash of the one used in Krondor. The old Dynamix flight sim engine could never handle the 640x480 SVGA graphics used in Antara. If you consider Antara's competitors (firstperson CRPGs such as Daggerfall, Shadows over Riva, etc.), you won't find a single one with Antara's resolution and detail. That's not dated, that's updated.

You also mention that the game world unfolds through a large amount of spoken and written interaction. Correct! Antara is a highly complex world, with a unique sociopolitical structure. That's what separates a CRPG from the traditional computer game — CRPG players expect depth in their games, and interactions such as "bring me a feather, and you can have the barrel" just don't cut it.

On lip-synching, we decided to go with Krondor's static image style. It's a judgment call, but we preferred shorter load times to watching William flap his lips. Television's eight-second rule would be tricky to apply — it caters to the limited time constraints of the medium, not to mention the short attention span of most couch potatoes. Fortunately, the CRPG genre is currently afflicted with neither.

You had stated that the storyline was weak. If you haven't played very far into the game, I can understand why you might think this. The first two chapters are designed to build up the characters

and allow them to explore the world...before we drop them, unwillingly, into a morass of politics and conspiracies. If you're basing your opinion on these first chapters, I highly encourage further exploration...I think you'll be pleasantly surprised!

Oh - one final note on value. If a gamer wants to thoroughly explore the world and discover all the wonderful surprises which lie in store just off the beaten path, there are literally hundreds of hours of gameplay available. (Did you know that you can mine gems in the caverns above Aliero? Or work with one of the world's greatest mages to solve a killing drought? Or visit the festival in Choth and participate in their yearly contest? The world is huge, explore it!) Even if you pay 50 bucks for Antara, that's pennies per hour of interactive entertainment — one heck of a good value, in my book.

Now, I'd better get going. I've spent so much time making Antara that I haven't had time to finish playing it! M.



Medium:

CD-ROM Developer: Adeline Software

Telephone: (310) 255-2050

Supports: WIN 95 Publisher: Activison

Website: www.activisoncom

Twinsen's Odyssey

by Scott Wolf



I WILL NEVER UNDERSTAND

why the marketing geniuses at so many software houses feel they have to change the titles of the products

they bring over from Europe. International copyright issues aside, the Americanization of a perfectly serviceable title rarely does the game justice, and sometimes it even hinders the public's perception of the product. (You should hear the howling of the flight sim community over U.S. markings added to the Eurofighter in Ocean/DID's stateside release of EF2000 V2.0!).

Adventure gamers may recall Relentless:Twinsen's Adventure, an unusually charming and clever game from 1994. The



original title, Little Big Adventure, which was de-emphasized over here, is all but forsaken in the outstanding sequel, Twinsen's Odyssey (aka, Little Big Adventure 2). It's really kind of a shame because no other title, before or since, is more accurately descriptive of what lies inside the box.

At first glance, this second tale of Twinsen, an ordinary Quetch who saved his planet from the nefarious scheme of evil Dr. FunFrock, seems a happy afternoon's frivolous escapade. At least that's what I thought, having never fully explored Relentless. Three solid days later I was still at it, amazed at the ingenuity of



design and sheer volume of graphic delights, and constantly underestimating the scope of what I, as Twinsen, had gotten involved in.

Odyssey starts out innocently enough on Twinsen's Venice Beach-like home of Citadel Island where, apart from the unusually rainy weather of late, life is good. The people are happy, and his wife, Zoe, is pregnant with their first child. After Twinsen finds the lighthouse keeper for the Weather Wizard, who needs the lighthouse's high vantage point to cast his fair weather spell, the rain clouds clear, allowing a fleet of flying saucers to land. The alien Esmers claim to have come in peace and wish only to share their knowledge with the people of planet Twinsun always a bad sign.

As the Esmers settle in, Twinsen goes about the hero's usual task of accommodating his whiny neighbors, who seem to be missing (and incapable of finding) the one essential ingredient needed for their life's fulfillment. And then there's the matter of healing your injured Dino-Fly, so you don't have to keep paying passage

for your endless island (and, later, planet) hopping.

As time goes by, the Esmers' true objective becomes chillingly clear: In service to the mysterious Dark Monk and his evil ally, Emperor, they are to kidnap Twinsun's wizards and children and then smash the Emerald Moon into the planet. The latter deed will release the benevolent magic of Sendell, which they can then put to their own evil purposes.

Like Relentless, Twinsen's Odyssey is played from a mostly isometric third person view, a format nearly perfected by creative director Frederick Raynal (Alone in the Dark, Time Commando). I say nearly because the format still suffers from occasionally obtuse camera angles and line-ofsight anomalies that inevitably result when rendering a detailed 3D world in two dimensions.

And like Relentless, Odyssey is played strictly from the keyboard, with a surprisingly versatile command set kept to a reasonable minimum, made possible by Twinsen's four different Behavior Modes Normal, Sporty (as they're called Athletic in *Relentless*, I suspect Spice Girl Mel C. had a hand in this), Aggressive and Discreet. Common keypresses perform functions unique to their Behavior Mode and although it sounds a bit complicated, it's not. Switching between modes with keys F5 - F8 soon becomes second nature (except, of course, for gamers already accustomed to *Relentless's* use of F1 - F4 for this action, who will now find themselves unexpectedly invoking a Save or Load game command instead of switching to Sporty or Aggressive modes).

Graphically, Twinsen's Odyssey is nothing short of spectacular, especially considering that it runs quite smoothly on a fast 486 with no special acceleration (in DOS, at any rate; the Win95 install requires a Pentium and DirectX). It's easily the esthetic equivalent to Lost Eden, Knight's Chase or City of Lost Children (without the dreary atmosphere), with architectural extravagance and evocative misty vistas at every turn. When not in one of 100 isometric locations, players guide Twinsen through an additional hundred pre-rendered 3D locations that give even Tomb Raider a run for its money.

Music plays an equally important role, with an impressive score by Philippe Vachey that masterfully mimics the mood of each scene, whether mischievous, apprehensive or dark and forboding. While the manual lists seven audio tracks my CD player was only able to find five of them.

There's no shortage of humor, either — from the wacky assortment of anthropomorphicized animals and their innumerable dialects (I swear that I heard Bullwinkle's voice in there somewhere) to their subtle behavioral quirks and the Esmers' pitiful attempts at camouflage. Imaginative modes of transportation abound as well, including Twinsen's own automobile (a snappy little dune buggy), Dino-Fly and assorted airships.

But Twinsen's Odyssey is not without its irritations, the worst offender being puzzles and enemies that reset every time a location is exited and re-entered. There's also an awful lot of backtracking and some puzzles (not to mention some combat near the end) that are just too difficult. Add to that Twinsen's too-limited jumping/climbing ability and the fact that he can neither swim, float or even wade, apparently, and you'll find yourself hitting the F3 / Return (load and confirm) combination big-time.

On the other hand, an improved and unlimited Save Game feature, including a handy Autosave, ensure that no stone remains unturned and no sudden death is irreversable. Players are offered gameplay



hints by many NPCs; those unfamiliar with *Relentless* need only peruse Zoe's diary for a recap of the major events in that game.

Perhaps most gratifying of all is the extended epilogue that follows Twinsen's completion of his odyssey. The entire cast of characters turns out for a huge block party on Citadel Island, a Taste of Twinsun, if you will. Esmers, Mosquibees, Blafards, Knartas, Rabbibunnies and Grobos all munch and mingle in a joyful celebration that seems to go on ad finitum.

Players who enjoyed Raynal's earlier efforts, not to mention D/Generation and Ecstaticas I & II are sure to delight in Twinsen's Odyssey. It is one Little Big Adventure indeed!

OVERVIEW

HITS: The dialogue is often hilarious and the occasional visual parodies are enchanting. Most of the

puzzles are challenging but fair.

MISSES: A lack of visual variety and too much disk swapping. Some of the puzzles are much too difficult for beginners.

LAST WORD

If you're a Meretzky fan, why are you wasting time reading? Buy the game!





Medium: CD-ROM

Developer: Steve Meretzky
Telephone: (888) SEGASOFT

Supports: WIN 95
Publisher: SegaSoft

Website: www.segasoft.com

The Space Bar

by Andy Backer



BELLY UP to the bar, boys. Steve Meretzky is back in space with another comic science fiction adventure. Most of the others he has designed have been

high quality, and *The Space Bar* is no exception. If you're a Meretzky fan, that alone should send you scampering to your local software store. If you're not a fan, you should be.

Meretzky games are funny, especially to gamers over thirty. He is a master of satire and parody, but his jokes will be better understood by gamers who are old enough to have seen *Star Wars* and *North by Northwest* (both parodied in *Space Bar*). He is also a master of the frustrating puzzle. There are always one or two puzzles in

a Meretzky game that are memorable for their extreme difficulty, like the memorable "babble fish" in Hitchhiker's Guide to the Galaxy. Space Bar's memorable puzzle requires the gamer

to mathematically determine a space trader's most fuel-efficient route. These kinds of puzzles may be a living hell for a novice, but they are a paradise of opportunities for mathematicians.

The gamer's alter ego is a telepathic, empathic human detective named Alias Node. Alias must interview a wide range of aliens, all located in a spaceport bar, in order to find the one who is a criminal trying to escape the planet. The gamer, because of Alias's special abilities, is able to experience each interview through the sensory organs — and sometimes with the webbed feet - of each alien. At some point in each interview, Alias automatically slips into their past in movie flashback form. He becomes Fleebix — the smart half of a planet full of symbiotic pairs. The smart ones, who are the size of a grapefruit, bully and try to command the dumb ones who carry them about. The gamer gets to experience Fleebix's frustrating attempts to get Thud to board a bus. Thud will attempt to board the bus without taking Fleebix with him or forget the bus token. The sequence can be as frustrating and hilarious as blocking the possible escape routes of Hitchhiker's babble fish. Alias

also becomes several more aliens including a robotoid, insectoid and vegatoid.

The game also boasts characters visually designed by Ron Cobb, the conceptual designer of the aliens in the *Star Wars* cantina scene, and smooth-motion 360-degree graphic views seen in glorious high color. Sound effects and music are particularly important in this game, since it's only partially animated. Playing *Space Bar* often feels like listening to "Golden Age" radio shows like *The Jack Benny Show*.

There just isn't a great deal of visual variety. Most of the game is experienced through dialogue and sound effects, while the characters on screen only move their lips and a tentacle or two. Meretzky even dares to let the screen go completely black for several minutes while the characters hide inside a box, seeing nothing and hearing only sound effects and dialogue as the box is picked up, put on a truck and delivered. There are, of course, moments when the characters can get out of the box (which provides some visual variety), but the sequence is almost pure radio comedy. Another scenario forces you to watch vegetation which doesn't move. It's funny, but it doesn't have a lot of visual variety, either.

A large cast of actors bring the witty dialogue to life. David Shatraw and Russell Horton are particularly noteworthy as



Fleebix and Thud, an alien comic-duo reminiscent of Abbott and Costello. Guy Paul is a soothing alter ego; his Alias is always calm, much like a cop in Stan Freberg's Dragnet parodies — "Just the facts, Ma'am."

The game package includes three disks for a PC and three for a Mac, but unless you copy the 622 megs from Disk 2 to your hard drive or have a multiple CD carousel you'll be constantly swapping disks. Because of all the disk swapping required, and its lack of visual variety, The Space Bar doesn't quite qualify for a platinum medal, but definitely deserves its gold.

OVERVIEW

HITS: The dialogue is often hilarious and the occasional visual parodies are enchanting. Most of the

puzzles are challenging but fair.

MISSES: A lack of visual variety and too much disk swapping. Some of the puzzles are much too difficult for beginners.

LAST WORD:

If you're a Meretzky fan why are you wasting time reading? Buy the game!

Ratings	
Dollar Value	28
Playability	18
Originality	10
Graphics	18
Sound & Music	10
Physical Components	9
overali ₉	3

Medium: CD-ROM

Developer: Strategic Studies Group

Telephone: 408-737-6800

Supports: WIN 95

Publisher: Strategic Simmulations

Website: www.ssg.com.au

REVIEW



Decisive Battles the of World War II: Ardennes Offensive of World War II:

by Robert Mayer



AFTER WHAT SEEMS LIKE YEARS of development, Strategic Studies Group (SSG) has finally kept its promise, releasing its long-

awaited Battle of the Bulge game. Originally dubbed The Last Blitzkrieg, then rechristened Ardennenkrieg or "War in the Ardennes," the game has ultimately emerged as Decisive Battles of World War II: The Ardennes Offensive (Ardennes), published by none other than Strategic Simulations Incorporated (SSI).

Intended as the first in a series of operational WWII games, Ardennes is a regiment-level, turn-based wargame with

options for network, e-mail, Internet and even serial connection play. Using a hex-based map to regulate movement and other

facets of battle, SSG claims that Ardennes has the best Al ever devised for a wargame. Fortunately, this is one instance where the game actually lives up to its hype; Ardennes is one great wargame.

Ardennes is SSG's most attractive game to date. The hi-res 640x480 display is stunning, its tapestry of colors evocative and effective. Most importantly, everything is easy to read. There are a number of display options available which permit the player some latitude when it comes to customizing the game. The command interface seamlessly integrates any mouse-enabled commands with the keyboard. Information is never more than a right click away, and just about every order can be rescinded if the need arises.

All of this would be pointless if the gameplay weren't first rate. SSG has done a masterful job of blending familiar aspects of play with a number of new innovations.

SSG's game system integrates combat and movement within the same operations phase, allowing players to synchronize their attacks and exploitations to a greater degree than in the traditional "movement followed by combat" type of game. Combat causes movement delays to units in surrounding hexes, preventing players from, say, rushing an armored division up to the forward edge of the battlefield area. Artillery, air support and German disinformation ("Operation Greif") teams all fit together in a cohesive fashion, and the system can randomize such critical factors as reinforce-

ments and weather to keep things interesting.

Ardennes also employs a dynamic strategic map, which tracks the front line and any combat

operations on a turn-by-turn basis. Players can cycle through

each day's positions with a simple click of the mouse, or let the computer display the front lines as they see fit. Units are depicted as regiments or brigades, while a handful of smaller ad hoc formations provide added support. Ardennes even takes into account divisional integrity for both the attacker and defender, and quite logically allows artillery units to support frontline operations from afar.

SSG's highly touted Al lives up to its advance billing. The computer is adroit if ruthless on the assault, right down to the handling of logistics and supply trains. On defense, the AI yields ground in an effective manner, vigorously pursues local counterattacks where applicable and is adept at halting the German drive short of the River Meuse. In one game as the Germans, I did manage to push the 1st SS into Liège, but not for long: the ensuing Allied counterattack very nearly destroyed my SS panzertruppen, who were only able to extricate themselves after some heroic actions.

Much of the game is well done - easy installation, few if any bugs, and a good manual. There are, however, a few flaws:



The tactical map is too small to properly view, and cannot be enlarged (the game is hardwired for 640x480); it's far too easy to forget that replacements have arrived; and while the miniature strategic map displays cities, terrain and the front line, it doesn't display units. Finally, the game makes no attempt to model corps and army-level formations, overlooking some of the most important aspects of the German's Wacht Am Rhein (Watch on the Rhine) operation.

These are, however, minor quibbles. In the end, this is still the best WWII wargame since the World at War series from Atomic and Avalon Hill, and The Ardennes Offensive easily eclipses these watershed titles. If SSG can release some sequels, we may finally see the rebirth of operational-level wargaming on the PC.

OVERVIEW

Gameplay, graphics, interface, Al.

Well, the music won't win any prizes....

THE LAST WORD:

If you like wargames, buy it. If you like WWII, buy it. A wargame not to be missed.

Dollar Value	28
Playability	20
Originality	8
Graphics	19
Sound & Music	10
Physical Components	6
OVERALL 9	1



Medium: CD-ROM

Developer: Colorado Computer

Telephone: 800-999-3222

Supports: WIN 3.1, WIN 95

Publisher: Avalon Hill

Website: www.avalonhill.com

History of the World

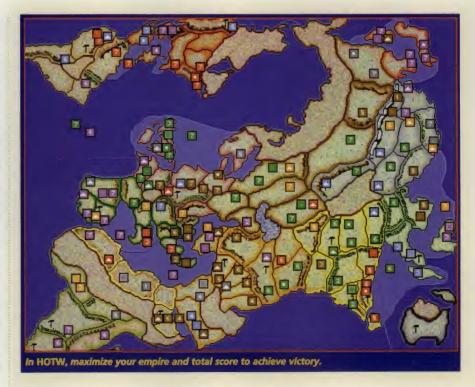
by M. Evan Brooks

HISTORY of the World (HOTW) is Avalon Hill's latest computer conversion. Based on a 1991 boardgame design by the Ragnar Brothers and converted by Colorado Computer Creations, this easy-to-play but strategically challenging game encompasses a historical sweep of over five thousand years, focusing on the many empires that held sway during that time span. Although it covers a similar time period as Civilization, HOTW condenses history into seven major epochs. The game's objective? Each player must attempt to maximize his or her empire and total score into an ultimate victory.

HOTW offers a multiplayer singleevening entertainment. It's a game of world conquest that is easy to learn, with rules that are straightforward and clean. Victory goes to the player whose empires have achieved the "longest standing in the sun." Victory points are based on control of territory, capitals, cities and monuments. The world map is divided into 100 lands (92 useable lands and 9 barren territories); these lands are grouped into 13 color-coded areas, e.g., Middle East, China, Northern Europe, etc.

As epochs pass, values per land are adjusted, based upon history. Early civilizations arise in the Middle East, but as the course of history evolves, civilization and its appurtenant victory points move both east and west. Thus, lands held in the Middle East begin at two victory points per land, increase to three over the next three eras and decrease to two, then finally to one, in the seventh epoch. Conversely, Northern Europe, worth nothing in the first two epochs, increases to four by the game's conclusion. An analysis of the areas shows that both India and China possess the most value over the millennia.

A contiguous civilization is worth more victory points. Having a presence in an area yields a basic victory point per land; having domination — control of at least three lands and more lands than any other player — secures double victory points; having control — occupation of every land in an



area — yields a triple victory point score.

A capital is worth two victory points, while each city and sea is worth one. Sixteen lands contain resources, and two resource sites allow the player to build a monument (worth one victory point). The computer will automatically place the monument and sometimes it even names it (e.g., the Franks build the pyramids).

The conversion of HOTW is well-done. It is a virtual clone of the boardgame, with few minor changes. The most important change is that it allows an additional person to play. The boardgame began with the Sumerian Empire — though not its victory points - falling to the last player as a bonus. The computer version allows for a seventh player, which permits each and every empire to strut its stuff on the world stage. Graphically, the program is acceptable except for event cards - the renditions of civil war and natural disasters is mediocre at best. All in all, though, even with a textbook-dry introduction, the game is actually better than it first appears. In the board version and in the lessthan-seven-player versions, there was always a doubt as to which empire would not appear; this doubt led to some interesting and strange gameplay. I for one appreciate the seventh player option, though, and it's even likely that most players will opt for a "full" rendition.

Kingdoms are randomly selected. The player may choose to auto-select or give-and-take. The latter option offers interesting challenges, e.g., one may keep a kingdom or give it away. Obviously, one would not want to give a strong empire to a leading opponent. But would the player improve his or her opportunity by hoping for a better kingdom? Only time and competent play can reveal the answer.

Expansion is through friendly held contiguous lands or via naval lines of supply. A capital is automatically built if the kingdom historically "had" one. For example, in Epoch 2, the Greek city states have a capital, while the Scythian Empire does not. In every epoch, there is at least one

empire that starts off without a capital. If a capital is captured, the empire is reduced to a city, and a city is reduced to nothingness. After all, how many tourists check out Ninevah and Xanadu today?

Conquest is simple. The attacking player rolls two dice to the defender's one; event cards and geographical obstacles may modify this. As long as the player has armies

available and winning rolls, his or her expansion may continue. Of course, total builds may be as few as four (Sumerian and Minoan Empires in Epoch 1) or as many as 25 (Roman in Epoch 3). The accompanying documentation lists each empire, its strength and navigational capabilities. Epoch 1 (2780-1500 BC) is relatively equivalent in strength; Epoch 2 (1274-485 BC) has the Persian Empire's 15 builds roughly doubling its opponents; Epoch 3 (450 BC-241 AD) has a similar numerical superiority with Rome; Epoch 4 (375-695 AD) seems to be a period of stabilization, although the

Huns and the Arabs have an advantage; Epoch 5 (768-1227 AD) has the Mongol strength of 20 doubling any opponent; Epoch 6 (1368-1605 AD) has the Ottoman Empire and Spain vying for world supremacy, while Epoch 7 (1547-1918 AD) offers the ascendancy of the British Empire.

Event cards allow for minor empires (e.g., Japan, Hittite), combat variations, natural disasters and civil war. Since only two events may be used per player per turn, there is a tendency to save them for later turns. Review the cards carefully; some are specific to particular epochs. There is nothing more embarrassing than losing because the player simply forgot to utilize his event cards in a beneficial manner.

Strength is important, but position is just as crucial. As empires rise and fall, their victory points do as well. So the first empire in an epoch rarely survives unscathed; in fact, it may rarely survive at all!

As empires wax and wane over the millennia, the player can recover from an occasional poor move. But watch out for the Roman and British Empires — when these appear, the rest of the world can only hope to minimize the damage. In a game of pickand-choose, it's rare that the same player receives both Rome and Britain (generally,

such a player will be called "the Winner"). But Rome's expansion may be checked and negated by future epochs and empires; Britain is followed only by the United States and Germany, both of which are too weak to offer any real challenge.

The player must decide when to go for broke and when to cut losses. But certain empires are weak sisters in the march of

Balor starts Britain.

Watch out for the British Empire & its iron-fisted grip!

civilization — particularly the Khmers (Epoch 4), the Incan and Aztec Empires (Epoch 6), and even the United States (Epoch 7). As the real estate broker said, "It all boils down to three factors: location, location and location." Thus, a small empire in the hinterlands with little chance to expand offers little potential to the player.

In some ways, receiving Britain is akin to possessing Australia in *Risk*. The paper version has evolved certain home-grown "house rules" in an effort to reduce Britain's iron-fisted grasp; for example, if players bid victory points for empires, then one might have to consider cost vs. opportunity in a more economic fashion. Similarly, if the United States were granted expansion rights in the Pacific Ocean, this would open up the final epoch.

Graphically, one can play on the strategic or tactical map. The former envisions the entire world and yields a good "big picture." The tactical map can center on the player's area of operations. Tactical or strategic perspective is a player preference. Personally, I prefer the strategic picture with occasional forays into the tactical display. Similarly, one may access strengths, victory point totals, cities, monuments and

history. The display parameters can be narrowed or expanded to yield virtually any information for which the player feels a need.

The ever-ready adviser will offer advice. Be aware that he is a non risk-taker. Computer opponents may be selected as risk-prone, risk-adverse or neutral. Choosing a risk-prone solitaire game will offer a con-

tinuous sweep of conquerors and vanguished, with little hold-overs from era to era. Defense is limited in HOTW. anyway; it should be focused on the construction of forts and fortresses only when additional expansion offers little point potential. Protection of capitals is generally useless, because their conquest yields a victory point to the conqueror (remember, it deteriorates into a city) and prevents the former occupant from enjoying its bounty.

E-mail play options are present, albeit a "hot-seat" Internet option is not. This is a severe flaw in a game whose strength lies in player interac-

tion. Together with the lack of new options, HOTW appears to be a faithful rendition of the boardgame — no more, no less — a quick and challenging player of a game. A final note of advice: Save early and save often! Although the designers have noted few problems, my personal machine generated a "general protection fault" at least twice per game.

OVERVIEW

HITS: Easy to learn, fun to play, this game of strategic world conquest has more nuances than are apparent at first glance.

MISSES: Occasional graphic and sound shortcomings; lack of new and improved play options; most

important, lack of Internet "hot" access.

THE LAST WORD:
If you liked the
boardgame, this is a
faithful rendition; if
not, you should try
it. But Avalon Hill
should also try to go
beyond straight conversions and appeal
to the strengths of
the computer itself.





Medium: CD-ROM
Developer: Impressions
Telephone: (206) 649-9800

Supports: WIN 95
Publisher: Sierra On-line
Website: www.sierra.com

Lords of the Realm II Siege Pack

by Robert Mayer



SIERRA On-Line's second Lords of the Realm game built on the accomplishments of the first, and Lords of the Realm II proved to be

one of 1996's better strategy games. Not content to rest on their laurels, the folks at Sierra's Impressions division have cooked up an add-on CD for the game, featuring a battle editor, new castles, new maps, Internet play, and a Skirmish mode that allows players to contest open-field battles and sieges, independent of the broader strategy game environment. Dubbed the Lords of the Realm II Siege Pack, this add-on disc goes beyond most collections of additional levels or new scenarios and adds some real improvements to the Lords game experience. New maps (both geographic and whimsical), enhanced AI, and various other improvements make the Siege Pack a good value for its approximately \$25 street price.

The Siege Pack enhances the original game in several ways. Most visible perhaps is the addition of the Skirmish mode, which allows for short, sharp real-time battles outside the structure of the strategy game. Two types of battles are provided: castle sieges and open-field clashes. The sieges feature a selection of castles ranging from small palisades to massive fortresses straight from The Hundred Years War. Playable as a solo or multiplayer game, these sieges focus on the struggle to breach the walls and secure the castle's flag, which invariably lies at the heart of the castle, secure behind thick walls and protected by boiling pitch, fastfiring archers and stout knights. The attractiveness of these battles is manifest, as there is something viscerally satisfying about battering down gates, scaling walls, and slaughtering peasants, all the while burning and looting as you go. In the full Lords game, such diversions can be a long time coming, but with the Siege Pack, sacking a castle is just a mouse click away.

The open field battles are a similar lot, with everything from small skirmishes to

full-dress cataclysms represented. These are great ways to get a feel for battles in the full game; they provide a lot more variety than many players will see in the course of an average game of Lords. Perhaps the best use for these battles for the solo player is as training for "real" war, either in the full game or against opponents.

Moreso than the sieges even, these battles are best savored as multiplayer scenarios, as the computer remains merely adequate as a medieval general. The Al relies on strength and numbers, and once beaten it is unlikely that players will lack for victories thereafter, having mastered the computer's strategies. Against other humans, however, field battles and sieges both should be much more challenging and unpredictable.

Internet play will facilitate these challenges, and the addition of 'Net play marks another of the Siege Pack's welcome additions. While earlier versions of the game sported IPX network support, Internet capability should expand the arena of potential combatants dramatically. Given the popularity of other real-time games on the market currently, it is reasonable to expect that the ability to duke it out in medieval battles will prove just as attractive. While Lords of the Realm II is not likely to challenge Red Alert for online supremacy, it would not be surprising to see a fairly large community of Lords players on-line. Sierra is ramping up the Sierra Internet Gaming System to handle its growing line of multiplayer games, and Lords should be a big part of this project.

In keeping with the move to enhance multiplayer options, the Siege Pack also includes an editor, so there should be no shortage of maps and battles to contest. Unfortunately, on this reviewer's machine



the editor, while functional, had some serious palette problems, probably stemming from an incompatibility with the ATI Rage II video system. Even so, the problem was not fatal, and most players will probably not experience any difficulties. Making maps for battles is fairly easy and should extend the life of the game substantially.

All in all, the Siege Pack is a solid effort from the Sierra/Impressions team, an attractively priced package that rolls enhancements, add-ons, and improvements into one convenient CD. Lords of the Realm II is a solid game itself, and this addition does nothing to dim its luster. Gamers who did not care for the original will not be swayed by this offering either, but fans of Lords will all want to add this supplement to their collection.

OVERVIEW

HITS: Internet play, variety, graphics, interface, editor.

MISSES: Al still a bit lacking, editor has some bugs, some of the strategic maps are a bit silly.

THE LAST WORD: Fans of Lords of the Realm II will want this add-on; it's priced right, and it delivers the goods.

Ratings	
Dollar Value	25
Playability	18
Originality	3
Graphics	16
Sound & Music	8
Physical Components	
OVERALL 8	31

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MONEY BACK GUARANTEE



Medium:

Developer: Erudite Software
Telephone: 919-461-0948

CD-ROM

Supports: WIN 95

Publisher: Interactive Magic
Website: www.imagicgames.com

The Great Battles of Alexander

by Allen Rausch

IN 334 BC A YOUNG GREEK prince, Alexander III, son of Philip II of Macedon, left his homeland with his army on a tenyear journey of exploration and conquest. During that journey, Alexander's army would travel some 3,000 miles, cross the territories of 14 20th century nations, and defeat the armies of both mighty Indian Maharajahs and the incredibly powerful Persian Empire. His accomplishments would earn him the name "Alexander the Great" and would carry his legend through history.

Alexander's name has been synonymous with military genius for the last 2,000 years. Now Interactive Magic is giving gamers the opportunity to see if they can match Alexander's skills. Great Battles of Alexander (GboA) allows players to take tactical command of Alexander's armies. A turn-based strategy game based on the classic hexagonal map system, GboA gives you a good feeling for the strategic challenges that Alexander faced and does it with a whole host of quality features that make playing the game both easy and fun.

Players may play either a single historical battle or follow a semi-strategic Campaign mode that challenges them to repeat Alexander's historical accomplishment — conquering the known world in just ten years. Battles include Alexander's first fight at Chaeronia where he fought as a teenager beside his father, the massive battle at Gaugemala where he broke the back of the Persians, and two battles in India where players will face the terrifying wrath of elephant cavalry. In addition, players can choose to fight as Alexander, or as his enemies — a very nice touch.

Graphically, combat is very well done. It's not spectacular in that "Ooh, cool!" kind of way, but the little soldiers that you manipulate on screen are well drawn and defined. Each unit has specific (and different) clothing and weaponry, making identification of different units a breeze. Even identical units of differing capabilities have different graphics. For example, Macedon-



ian hoplites are far more effective than mercenary hoplites and can be recognized by different tunics and shield designs. This can be important when deciding which units to preserve and which to sacrifice. Combat is often decided by how well you use one or two of these "Elite" units.

The warriors are animated in a rudimentary but satisfactory fashion, and it's quite enjoyable to watch different units

I-Magic gives gamers the chance to see if they can match Alexander's skills.

clash with each other. Dead soldiers, horses and elephants litter the ground after these fights, however, and they can visually blend in with your living units, causing confusion as you try to decide your next moves. Fortunately, the game provides an option to clear away the corpses. In addi-

tion, the trees have a tendency to cover up units so completely that it's possible to lose track of them.

The sounds, although limited to a few ambient effects and the yelling of troops, are also quite well done. The in-game music, however, is annoying and most gamers will turn it off after a few minutes. This is unfortunate. Although this is not the kind of game that gets produced for its graphic and audio flash, they still help get players into the "feel" of the game. Graph-

ic and audio elements, such as the opening title screen and the "historical" video that details the life of Alexander, could have been done much better without a lot more effort.

The heart of *GboA*, though, is its tactical combat system. It's here where the game really shines. The game interface and combat mechanics are very straightforward and easy to learn. All of the conventions of hex map turn-based combat are here, including terrain modifiers, fatigue and morale and leaders with a set number of command points representing the number of units s/he can give orders to in a single turn.

It is obvious after playing for only a few

minutes that the game's designers really did their homework on Alexander. All of the units of the period are represented, including archers, slingers, phalanxes, javelineers (on foot and mounted!), chariots, cavalry and everyone's favorite, elephants. Each of the units has its own strengths and weaknesses based on their historical role in battle. This often leads to some surprising discoveries during combat. For example, horses hate elephants. GboA reflects this by making horse units lose "cohesion points" when near elephant units. Putting them in a situation where they come into contact is an easy way to lose the battle, as your cavalry units break up and your panicked elephants trample your own troops (I learned this the hard way!).

Another interesting facet of the game is its views on leadership and its effect on the battlefield. One of the things that made Alexander so "Great" was his leadership. Rather than follow usual sequence of one player moving, then the other, leaders are rated for their initiative and their command range. Once a leader gives his orders, he sets his forces in motion, and then play shifts to the leader with the next highest initiative, even if the leader is on the other side. This gives the movement of troops a far more realistic and elegant feeling. Players need to react to rapidly shifting battlefield conditions without necessarily knowing which leader or troops they're going to be able to move next. This gives the game a dynamic real-time feel without sacrificing what turn-based strategy gamers enjoy most, the luxury of time to consider maneuvers.

The game's multiplayer component is well designed. Rather than restricting players to two opposing sides, GBoA allows each player to have control over one or more of the leaders on the battlefield. This makes multiplayer combat interesting, to say the least. Players on the same side will need to carefully coordinate their strategy to avoid working at cross-purposes ("No, Bob — don't cross the river yet!"). Fortunately, the game contains a well-implemented chat function. Players who choose go solo, though, will find the Al quite competent.

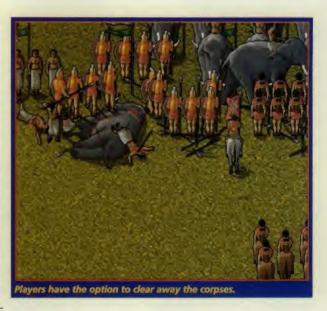
GBoA's Campaign mode features all of the major battles fought by Alexander, and the player's goal is to conquer what the real Alexander did during a ten-year time frame. The Campaign mode is rather linear, although the gamer doesn't have to conquer the world in the same order Alexander did. There are some small strategic elements that include putting down provincial revolts and managing troop placements, but on the whole, once you've beaten the campaign, there's little reason to replay it.

With all this going for it then, why is GBoA merely a good, rather than a great, game? Its minor flaw is that, for a game with fairly simple graphics and animation, it runs quite slow on anything less than a Pentium 100. For some of the larg-

er battles, such as *Gaugemala*, anything less than a Pentium 120 can be agonizing. Although the manual suggests turning off the animation, doing that removes one of the biggest charms of the game.

Its major flaw — and it's a doozy — is that game is not set up to allow for user modification. Even acknowledging that Alexander was a military supermind, the reason that wargamers refight his battles is not to duplicate Alexander's strategy but to come up with one of their own. GboA allows the player no opportunity to fiddle with the historical battles. Players can play as either side, and this does extend the life of the game somewhat, but in the end, once you've figured out a strategy to win the battle, there's never a reason to return to it.

In the time it took to input the fairly useless Campaign mode, Interactive Magic could have installed a decent unit and battlefield editor. It would be terrific to have the opportunity to use King Darius's swift chariots against the Indian elephants, but it's impossible in GboA. The ability to alter the speed or armor ratings of units to simulate advances in metal and warcraft technology would have made this a better game. Equally unforgivable is the fact that players cannot change their initial troop placement or army composition. Each time you play a battle, it's with the exact same troops in the exact same positions. Restricting the player to what was present in the historical battle feels very confining. Imagine the same game where you enter each battle as Alexander must have, unsure of the composition of the opposing forces and the lay of the land (perhaps before each



battle your spies could bring you reports on the nature of the troops). The player should be able to decide which troops to bring, perhaps based on a point system in single battle mode, or production capacity of the territory in Campaign mode, and then lay them out based on their own judgment.

This unfortunate flaw doesn't mean that *Great Battles of Alexander* is an inferior game. In most respects it's quite good, and most serious wargamers should have fun with it. What it does mean is that the game is limited in appeal and replay value.

Alexander died of fever in Babylon in 323 BC. He left behind a mighty empire that disintegrated within a few years. *Great Battles of Alexander* is much like the legacy of the real Alexander: It's great while it lasts, but when it's over, it's gone.

OVERVIEW

HITS: An accurate and enjoyable simulation of Alexander's career. Nice graphics and sound effects. Solid Al provides a good solo challenge. Easy-to-use interface. Multiplayer component well integrated. Excellent online documentation with a wealth of historical information.

MISSES: Easy to lose track of units in forests. Music is annoying. No random or user-designed battles. Limited replay value.

THE LAST WORD:

A fun, stylish game that will appeal to turn-based strategy gamers, it's marred only by its lack of replay value.





REVIEW

Medium: CD-ROM

Developer: Jane's / Sonalysts
Telephone: (800) 771-3772

Supports: DOS, WIN 95
Publisher: Electronic Arts

Website: www.ea.com

Hunter/Killer 688(I)

by Ed Dille



WHEN IT COMES

to simulations of modern submarine warfare, EA held bragging rights for a long time. The original 688 was released over five years ago and,

although it wasn't perfect, it held its own. Subsequently, EA produced Seawolf, which made considerable headway in its depiction of passive sonar suites but compromised far too much on realism in favor of quick gameplay. Along came Fast Attack, Software Sorcery's modern sub simulation that (again) was imperfect but was still farther along in the engagement queue than the other titles. To take the Captain's Cup back, EA got very smart. First, they used DoD contractor Sonalysts, Inc. to develop the acoustic models as close to the real world as allowable within National Security constraints. Second, they tapped Jane's Combat Simulations to develop the title, which ensured that 688(I) would get the benefit of the best platform, weapons and fire-control databases in the unclassified world. This menage à trois has been consummated with the release of 688(I) Hunter/Killer, a simulation of modern submarine warfare that comes closer to perfect than any title that preceded it.

Good submariners are like good chess players. They absorb all the information they can by listening quietly, and they constantly search for position and opportunity. They need to be able to say, "Checkmate," in as few moves as possible, from the instant they are given the order to engage no matter what they were doing prior to that. And, concurrently, they must do so without anyone even knowing they were there — until it is too late. Stealth is life under the waves, not speed like in the air. So are you feeling sneaky today? Let's see if you're up to this mission, sailor!

The entire 688(I) attack boat is a complex, completely integrated weapons system. Virtually every piece of gear on the boat comes into play in setting up a single



The stadimeter is an optical device that allows you to approximate the range to a visual contact by lowering the masthead in the right window to the waterline in the left window. It isn't exact, but you can generally get close enough for government work!

attack; there is no wasted space on a submarine or in this simulation. As such, you must learn how all the individual equipment functions and interacts with all the other equipment to detect, localize, classify and track targets. A series of tutorial missions will walk you through each of the sub-systems in this process.

Your initial contact with any surface or subsurface contact is generally a broadband sonar contact. This is the detection phase of the engagement process. The information you obtain on the target is basically a line of bearing to the target.

Over time, these lines of bearing change due to the relative motion between your ship and the target. If they don't, you can maneuver your ship to change the relative motion. These lines of bearing are plotted on the Target Motion Analysis (TMA) plot to localize the contact (step 2). Localize means to reduce the area of probability where the contact might be.

The third step in the engagement process is classification. When you classify a target, you determine exactly what class/hull type the target is, so you know exactly what threat, if any, it poses to your own ship. The primary method of classification is through



The broadband display gives you lines of bearing to particular sound sources, which are then plotted over time, using target motion analysis (TMA).

narrowband processing. Regardless of which sonar array you hold contact on, the spherical array (in the bow), the hydrophones along your hull or the highly sensitive towed array, narrowband signals are processed the same way. Narrowband refers to discrete frequencies within the broadband "noise" you initially detected to gain contact. These base frequencies, and their harmonics, are basically acoustic fingerprints for a given class of ship. You can compare the frequency spectrums you are receiving to a database of known hull signatures and positively identify what class of boat/ship you are dealing with.

The last step in the process prior to actually engaging a target is to develop a tracking/fire control solution. The quality of your fire control solution is a factor of all the aforementioned inputs, so errors introduced at any level in the process degrade your ability to effectively engage a target. The tutorials guide you through

every step of the process, so you can micromanage as much of it as you want as the game progresses. But for those players who don't like to get down to the nitty-gritty aspects of target classification, one can also allow the Al-controlled crew members to handle these functions. As a rule, in the early going the crew performs adequately, but they take longer to come up with firing solutions than if you manage the tactical

situation personally. In fact, you should do that in the early going for two reasons: it

builds the confidence you will need when things get really hairy later on, and the Al crew actually improves over time with successful missions. Your effort and personalized attention actually trains them to do better!

Once you begin to develop the quiet cockiness of a good chess player, it's time to dive into the heart of the game, which is the campaign engine. Granted, there are single scenarios to play also, but taking on a tour of duty should be your goal from the start. The mechanics of the campaign game are very well thought out. Missions reflect the realities of the post-Cold War world, from conducting LEO (Law Enforcement Operations) missions against drug cartels to intelligence gathering, SEAL insertions and extractions, cruise missile strikes in support of ground offensives and, of course, the requisite number of "hot war" missions. In between each mission, you will get the opportunity to make modifications to your submarine, upgrade equipment and weapons, even rotate crew members. The inclusion of these role-playing elements make this command simulation more real-world than most.

Once you are underway, you will find that very few concessions have been made to gameplay over realism, and the ones that have are acceptable. First, the

SE SCALE (KYDS)

are counter-detectable, so most 688 skippers only use radar for pilating in and out of port and a few other special situations; not

688(I) has two periscopes but the game merges the functions of both into one

> scope for simplicity's sake. Second, four external camera views have been included that

just don't exist otherwise. Periscopes are the submarine's only "windows to the world," but in the game you can pan around outside your boat, even zoom in to look at enemies nearby or hop in the nose of a MK 48

ADCAP torpedo or Harpoon anti-ship missile and ride it straight into the target. Of course, purists can avoid these views if they like; it may not be as fun but it's more real that way. Finally, you are still a little more resistant to damage than you should be, but it is nowhere near as lopsided as Seawolf was.

The graphics in 688(I) are outstanding, from the bubbles which spin in the wake of your "fish" to the level of close-up detail rendered on each of the ship classes, which makes visual classification easy once you've gained a little scope time. But the sound is what really sets this one apart. Yes, you can hear cavitation bubbles (the air which forms when a screw moves too fast through the water) and distinguish them from the sizzling sound of schools of shrimp.

The Al-controlled enemies get progressively more challenging as the campaign progresses, and Jane's has included multiplayer options, including Internet play for those skippers who start really feeling their salt. Unfortunately, unlike the original 688, these must be blue-on-blue engagements. You both take 688(I) boats and can either work cooperatively to clear a mission or take each other on in a "simulated" training exercise. To see what one of those engagements is like, check out the "Warpath" column in next month's issue.

Overall, it's tough to find fault with 688(I). Inexperienced players may have a tough time developing the mindset they need to really excel at this game, but they sure won't be bored if they run around at 30 knots looking for quick action — they'll be dead. Let that happen a few times though, and they will be running under the thermal layer at 4 knots with the best of us, trying to pick out that one little tonal that says there is a Soviet SSBN (Ballistic Missile Submarine) in the area. OK Ivan, there you are, let's play!

OVERVIEW

HITS: Solid interface. good tutorials, welldesigned missions; crew Al improves with mission success.

MISSES: Novice players will find it difficult to master, and patience is critical.

LAST WORD:

Run Silent, Run Deep, Play Often!

Ratings	
Dollar Value	27
Playability	18
Originality	9
Graphics	19
Sound & Music	10
Physical Components	9
OVERALL	2



DARK COLONY

There is life on Mars. And in the twilight of the 21st century, it raises its ugly head. Dark Colony transports you to that not-so-distant future where warring corporations have plundered. Mars and unearthed a horrific secret. Now, all must suffer the consequences.

This is real-time factical combat – smart, visual, and violent.

The animation? Flawless. Feel the heat and toxic gases single your eyes with each fiery explosion and massive eruption.





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TODAY, WE'D LIKE TO SHOW YOU HOW NICELY THEY'VE GROWN UP.



Medium: CD-ROM

Developer: CyberLife Tech. Ltd.

Telephone: (415) 897-9900

Website: www.mindscape.com

Supports: WIN 3.11

Publisher: Mindscape

Creatures

By Gerald Williams



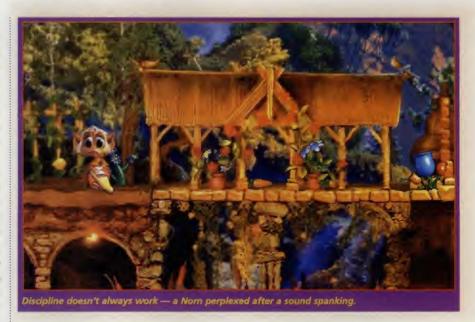
PLAYING CREA-TURES by Mindscape may make you a feel like parent, a teacher, a scientist...or even a god. Actually, it is not so much a game as it is an exercise in childrearing.

There is much to be learned and appreciated when you enter the world of Albia - a land full of fun and excitement but also one fraught with dangers — and assume full responsibility for guiding and governing the lives of Norns (as these creatures are called), once you've helped bring them into the world. I found the game somewhat serious in concept but fun in real play. There are laughs aplenty to be had — many of them on yourself as you endeavor to care, nurture, teach and guide the curious and somewhat mischievous Norns. So before you get into Creatures, make sure you have a strong sense of humor at the ready, especially as pertains to laughing at yourself. Also, check out the Tutorial before you begin boning up on the fundamentals can save you a groan or

two later on. The Norns are like us biologically, with brains, DNA - the works. To help you help them become adults. responsible Creatures has placed a number of Kits at your disposal: Health, Science, Breeding

and Emergency, to name several. These will not only assist you in making decisions about the state of your charges at any given time, but it will provide you with the materials or information about the materials - you may need for their education and comfort. When they reach adulthood, Norns can mate and have children, and even great grandchildren. The life span of Norns is roughly 15 hours; they become adults after being onscreen for one hour and twenty minutes.

As has been mentioned, Albia is not an



Eden; its imperfections can in part be traced to green grumpy Grendels - squat, bellicose tree-dwellers who love to steal food and raise hell in general. Keeping the latter out of the clutches of the former will be one of your most demanding

Creatures is not so

much a game as

AN EXERCISE in

child-rearing.

chores as foster parent.

Creatures, which can be played on PC or Mac, can be upgraded via he Internet.

The game is perable mouse and keyboard. You, the player, are represented onscreen by a

manipulable hand that either points or picks up, depending on whether you use left or right mouse clicks. (I take that back: your hand, as a behavior-training device, can also tickle or spank to condone or criticize baby Norn behavior.) You can survey the lay of the land by scrolling up and down or from left to right.

Begin Creatures by selecting a Norn egg (running the hand above them will indicate their sex) from the hatchery nest, then placing it in the incubator. It's better to work with two Norns, for they enjoy company. Use the Owner's Kit for registering their births, naming them, and for taking their baby snapshots.

By educating them as soon as you can, you will lighten your child-rearing responsibilities — and then go and hatch some more. Via an elevator, take your Norns to the computer room on the floor above and coax them to remain in front of the screen so that you can teach them the essential vocabulary that they'll need to get smart and survive. Coaxing can be done with a bouncing ball or a spinning top. Generally, infant Norns will follow either of these to the location in which you wish to place

Child Norns will read the words you plant on the TV screen and cease babbling baby talk to try to learn to say them - and they usually do after a few tries. Essential vocabulary includes words such as "run," "drink," "sleep," "eat," "come," "get," etc. You can even write in your own words. Next, teach them what is to be found in Albia in terms of food, shelter, and lurking dangers. Like most school kids, Norns are apt to have short attention spans. To make sure they're learning their ABCs, open the Eye icon which will give you a view of how well they're concentrating. Learning difficulties could be attributable to poor nourishment, so check your Science and Health Kits to see if there is anything they need in order to function as they should. If inadequate diet is the cause of their sluggishness or lack of attention, feed them carrots, cheese, honey, or any of the other foods to be found in Albia.

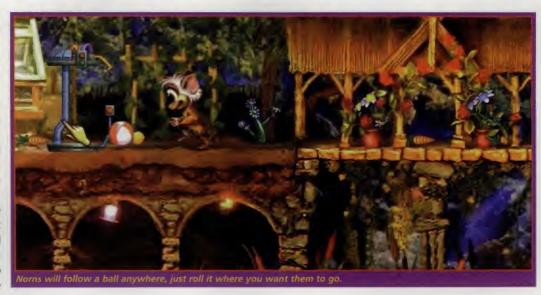
Once the Norns indicate that they have absorbed at least the basics of the sound education you have given them, you can feel free to allow them to explore the wonders of lush Albia, where

there's much to be enjoyed — movies, musical instruments, cable car rides, watersports.... The only things they (and you) have to be on the alert for is Grendels. (Actually, with proper training, Norns can fend for themselves.) An occasional fright from time to time livens up the adventure of living and learning.

When Norns become adults (after 1 hour and 20 minutes of onscreen time), they become sexually active. This presents a whole new set of duties for the player. You can keep yourself abreast of their sex drive by referring to your Science Kit, which will apprise you of their testosterone and estrogen levels. Teenage Norns, like all teenagers, like to kiss. But there's a special-sounding kiss that will let you know that something more meaningful has been going on — and that smacker



ends with a popping sound. Making sure that the expectant mom gets all the care she needs through her five-to-seven months of pregnancy will keep the player pretty busy. You can count the months



until birth as they appear on the female Norn's belly. The knowledge you've taught your first generation can be transferred to the next line, so this is where your hard work (whew!) really pays off, if you've

done a good job as a parent.

Here's where you can segue from a parent/teacher mode to a (mad?) scientist one. If you've got a penchant for genetics and have always wanted to give Mendel's Laws a try.... You can even mate, via diskette transfer, one of your Norn with one in someone else's game, and vice versa. Frankly, some of the manual's tips on breeding conjured up, in my mind anyway, the highly publicized cloning experiments conducted in Scotland. But maybe that's just me.

After several hours, I found the game frustrating to the point of distraction. It's good to take a break now and then, especially if you're not sure you'd make a good parent. Of course, there's always the out of giving a disobedient Norn a whack, but that does little to advance his or her learning ability — and ultimately deepens your

frustration. After you've spanked a Norm's backside, he or she looks out from the screen at you with wide, pained innocent eyes — it makes you feel just like, well, a Grendel. Patience is what you must be

armed with when you commence Creatures.

While a unique game, Creatures is not for everyone. Gamers seeking action and adventure will be impatient with its "educational" tone and repetitive tasks. More bells&whistles or task-unrelated fun for players could ease stress. Model teachers and parents would probably find this game a piece of cake, however, and even imperfect ones might be willing to cheerfully take up the challenges presented. Last week, over drinks and dinner, a friend who

teaches autistic children and likes it reacted enthusiastically to my description of *Creatures*. She's sure to buy the game.

OVERVIEW

HITS: Excellent visuals, engaging theme. A unique type of game & learning experience.

MISSES: Frustration level too high. Multiple tasks overwhelming. When played for too many hours, interest tends to wane.

LAST WORD: A good learning tool — and fun — for educators or parents-to-be...or anyone else with a lot of patience.

Ratings				
Dollar Value	25			
Playability	15			
Originality	10			
Graphics	18			
Sound & Music	8			
Physical Components	9			
OVERALI.				



Medium: CD-ROM

Developer: Sierra On-Line Telephone: (206) 649-9800 Supports: WIN 95

Publisher: Sierra (Dynamix)
Website: www.sierra.com

Baseball Pro '98

by Bill Holmes



EVERY TWO YEARS,

like clockwork, the best baseball game on the market shows up with some new features to push the envelope just that much more. Welcome to Baseball Pro '98, the

game that rewards serious baseball fans. For those not familiar with previous versions of the game, Front Page Sports Baseball (later Baseball Pro) was the first baseball product to truly incorporate the physics of the game - the dives, spins, wind effects and other oddities that make baseball simple and unpredictable at the same time. Because of the hardware limitations of the era, the early versions dropped from a high resolution BPI (batter-pitcher interface) to low resolution animation that looked cartoonish by comparison. Simulating league games with statistical integrity took days where competitor's games took minutes. Fielding adventures provided highlight reel catches but also illuminated some bad judgment by the artificial intelligence (AI). For the casual player, some of this was too much to take, but those who played in leagues understood that they had a diamond in the rough. Later editions of the game cleaned up some areas and added new features, but in Baseball Pro '98 we have a whole new ballgame (sorry).

For starters, the interface is much simpler and lets the player quickly get to a favorite area without wading through a maze of menus. This is just one of literally hundreds of settings that can be changed now that Sierra has opened up the .ini file to let the gamer work with it. Also vastly improved is the computer Al: that annoying "fire-brigade" relay throw is gone, with more outfielders throwing through to the base, and infielders going for the double play when they can instead of throwing (late, usually) to get the lead runner in a nonforce situation.

The big problem even for Front Page fans was the amount of time it took to sim

games. Finally, the team has reduced that wait to a reasonable level, while still preserving the statistical accuracy by simulating every pitch in the background instead of running quick calculations from a probability table. There are stats up the wazoo, and players and teams, as always, can be customized to your heart's content. The player ratings that shipped with the initial version do seem to be the most realistic so far, but you'll find better sets on the Internet by the time you read this.

The online and print manuals are thorough and well organized, and even new players can get the hang of everything in a few minutes. There is a detailed section for troubleshooting problems and slow play, as well as suggestions for custom settings to better suit your style. Stats can be imported or created in a database format, and many custom leagues are already all over the Internet. The new separate difficulty settings for home and away teams is a godsend, and there's a thorough explanation of how to run or participate in a remote league - a dimension that by itself makes this game a must-have. For gamers who have difficulty with arcade play, the new "smart move" and "smart throw" take some of the guesswork out of fielding, and the ball tracking options help you predict and react on defense as you practice. The batting practice utility allows you to match up any pitcher with any batter on any field.

The graphics are great, the animation wonderful (dives, slides and jumps, oh my!) and there are multiple information windows (play by play, linescore, etc.) that you can arrange in a custom setting. You do need a good system to make this baby hum, though — best to have excess RAM and minimize detail (i.e., player names in the graphics) where you can to facilitate game speed.

So, is it perfect? Of course not, it's the 1.0 version. There are too many walks and too many foul balls; some of the teamnews information disappears, and the roster management bug makes retirements



and injury factors a harsh (un)reality. The minor league players, even with Spring Training, still don't ramp up fast enough to be true AAA players. But in their defense, the *Front Page Sports* team has always been upfront about fixes and enhancements and go out of their way to upgrade and fix the product ASAP. There is both a bulletin board on the Web page and an email link to designer Doug Johnson, and feedback is encouraged, not ignored.

I'm not saying this is the only baseball game you should own. There are other games where the players look exactly like the real people, and/or great announcers set the mood and tempo for a game. But this enduring product is far and away the closest thing you'll get to real baseball, and if you want some serious rewards for your dollar, you'll pick this one up immediately.

OVERVIEW

HITS: League play, edit-able setups, real physics,

career leagues, many improvements — all the bells and whistles.

MISSES: Buglets in the first release; but they will get fixed.

LAST WORD:

I'd rate it higher if not for the initial tweaks. If you enjoy the strategy and management of baseball as well as the arcade aspects, buy this game.



Medium: CD-ROM
Developer: Anco

Telephone: (800) 33-MAXIS

Supports: DOS, WIN 95

Publisher: Maxis

Website: www.maxis.com



Kickoff 97

by Bill Holmes



SOCCER (football to you non-Americans) is increasingly becoming the sport of choice at the high school levels, so it only makes sense that more and more game

companies are taking the plunge with their sports line. And why not? Anyone with average agility can play to some degree, and the point of the game will ring familiar — put the ball in the goal. With Kickoff 97, Maxis doesn't break a ton of new ground, but it does provide a fast and fun way to play the game to your heart's content.

Firstly, kudos to Maxis for doing something most game companies constantly forget — include the rules! Although soccer fans will be familiar with them, arcade games naturally target the younger gamer, and the few pages of information explaining everything in a concise manner is invaluable to those just learning. Overall, the manual and help aids make jumping in a snap.

The game can be played in leagues or friendly matches as well as standard and customized tournaments. By setting the computer to control various teams, you can easily simulate the other games as you work your way to the cup. But you'd better practice first.... Using a mouse, keyboard or joystick (preferred), movement is simple directions plus a button for shooting and one for passing. Various combinations of keyboard commands or button/directions will enable you to dive, slide or perform fancier moves like bicycle kicks and headers. These take some time to master, but when you get the timing down they're pretty exciting to watch. With 32 slots for saved film clips, you can also relive your glorious moments again and again. The replays demonstrate just how good the graphics are - nets bend, limbs flex, and the players move realistically.

Like the best sports games, Kickoff 97



can be customized to suit your needs or left alone to work at default levels. For those interested in doing so, management utilities will allow you to create players or assemble teams from the thousands of players contained on rosters. All players are rated for abilities such as speed, defense and aim, and their performance will reflect these numbers. There's nothing more frustrating than being completely overmatched in a game, so users just getting started can select a weaker opponent to face off against or even create a team that has poor skills. As practice makes perfect, the quality of the opposition can be stepped up.

Another solid concept is the practice area, where everything from penalty kicks to dribbling skills can be honed. This area could have been a game all by itself. For certain drills you work solo, while others put opposing players in your face. Although that's tougher than playing alone, you will get better faster playing under gamelike conditions. My favorite is the "team practice" mode, where you have the pitch set aside for your entire team without opponents. Because you always control the player with, or nearest to, the ball, it's ideal for practicing passing, headers and other strategic moves. You're actually controlling the team as a whole,

so it's easier to see what different formations will work best with your style of play.

The animation is very fast and smooth and, with multiple camera angles to work with, easy to follow. There is an optional overhead scanner that shows the position of all your players so you can avoid getting an offside. Even the refs have different personalities, and they're no slouches, either

they'll throw that red card if you are blatant enough. The announcer is good and not obtrusive, and the crowd reaction usually appropriate for the situation. A good opponent will be all over you like a cheap suit, and if you let your goalie take shot after shot, the poor guy is going to start falling apart. So, substitute! Function keys facilitate everything from personnel changes to camera moves.

OK, so they didn't call it Sim Soccer. So what? It's fun! Maxis has supplied us with a solid soccer package that will keep arcade players happy for a long time.

OVERVIEW

HITS: Fast play, ability to customize almost anything, fluid animation.

MISSES: Not much
— Internet play
would be nice
though.

LAST WORD: Not anything ground-breaking, but plenty to keep you busy. The practice area is almost a game all by itself and is well-thought out. Solid investment for soccer fans.



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*Source: PC Data 1996, **5 out of 5 stars from the following publications: Computer Gaming World, Computer Games Strategy Plus, Next Generation, Jane's Combat Simulations is an Electronic Arts brand. Advanced Tactical Fighters is a trademark and Electronic Arts is a registered trademark of Electronic Arts.

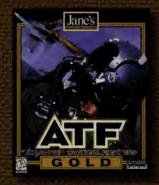
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FIREPOWER:

Missile Command



by Tom 'KC' Basham

any flight simulations — too many in my opinion do not adequately tress missile performance. Between the

address missile performance. Between the whiz-bang videos released from the Gulf War and the inattention to detail most flight simulations exhibit, the public has developed a warped perception that missile-based engagements are nothing more than a long-range, push-button form of warfare. I've heard many users comment that they prefer WWII or WWI-based flight simulations, since missile engagements tend to be "boring." In general, if you find missile engagements "boring," then the simulation you're flying probably isn't very realistic.

Given the many modern-era flight simulations produced over the last decade, relatively few have featured complex missile

performance models. Those that do manage to impressively model weapons performance usually fall flat when it comes to gameplay. As exemplars, both Su-27 and Back To Baghdad include extremely impressive missile models; unfortunately, neither game is as popular to play or as enjoyable to fly as, say, Falcon 3.0. This has led to some debate in gaming circles, some pundits wondering if realism actually helps to sell flight simulations, even though it appears that the lack of gameplay hurts the product, not the inclusion of realism. That, however, is an argument best left for another day.

THE ENVELOPE, PLEASE

Properly employing a missile requires a thorough under-

standing of the weapon's Launch Acceptability Region (LAR). Commonly called the "performance envelope," the LAR basically denotes an area of space around the target aircraft. Missiles fired at the target

aircraft from outside this area have no chance of hitting the target. Figure 1 depicts the possible missile launch enve-

lope for a hypothetical missile.

Notice how the LAR is elongated ahead of the target and blunted behind it; this is directly attributable to the missile's limited range. In the real world (and in some simulations), the missile's motor does not run the entire time the missile is in-flight. When launched, the engine ignites then quickly accelerates the missile up to maxi-

mum speed. After a few seconds, the motor exhausts the fuel supply and shuts down. From this point on, the missile basically glides toward its intended target. Motor burn times vary from missile to mis-

If you find missile engagements "boring," then the simulation you're flying probably isn't very realistic.

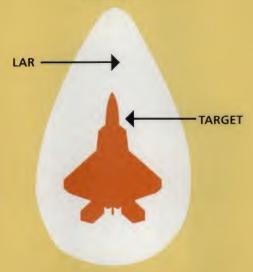
sile. I've never seen exact burn times listed in any public source, but the burn time is generally pretty short, usually less than 30 seconds. According to some sources, some missile motors may run as briefly as 10 or 12 seconds! The faster the aircraft is flying at launch time, the faster the missile accelerates to, and sustains, maximum speed, and the more energy the missile retains when it reaches the target.

Range is a highly subjective topic. Typically, missile range values listed in reference books are useful *kinematic* range values, not maximum ranges. The kinematic range generally indicates how far the missile can fly before it decelerates to Mach 1. Although substantially below the missile's maximum speed (usually around Mach 3 or 4), Mach 1 still provides enough energy to engage the target.

Range also varies, depending upon the missile's launching altitude, with range increasing at higher altitudes. Generally speaking, a missile's range when fired above 20,000 feet MSL will be about double its range if launched from sea level.

The range will double again somewhere near 40,000 feet MSL. For look-up or look-down shots, the missile's range is related to the median altitude between the launcher and its target. Unclassified reference sources generally calculate the AMRAAM's range as approximately 30 to 40nm (nautical miles), but that figure is meaningless unless the source specifies the

NOSE ASPECT



TAIL ASPECT

Figure 1

launch altitude. Most likely, this figure comes into play at around 20,000 feet, thereby reducing the missile's range, at sea level, to roughly 15nm to 20nm.

Since the missile has a finite flight range, the target's heading has a substantial impact on the LAR. Say the missile can fly a maximum of 20nm. In a tail-chase scenario, the target is moving away from the missile. If you fire a missile 20nm behind your target, it will fly the 20nm to its original destination, only to discover that the target is no longer there. During the time it took the missile to cover those 20nm, the target, depending upon its speed and the speed of the missile, has traveled several more miles, placing it safely outside the missile's range. The faster the target is moving away and the slower the missile flies, the farther the target moves away. Consequently, when you're firing a

missile from directly behind your target, you must reduce range before releasing the weapon. Conversely, during headon approaches, the target will reduce range with the oncoming missile. This explains why the LAR in figure 1 appears shorter behind the target than ahead of it.

DO THE MATH

Let's analyze some examples. Assume you're flying an F-16 at 300kts at 30,000 feet above mean sea level (MSL). You want to fire an AIM-120 AMRAAM at a fleeing MiG-29. The MiG-

29 is headed directly away at 500kts at 10,000 feet MSL. Assume the simulation in question uses 35nm for the AIM-120's nominal with a top speed of approximately Mach 4. Calculate the missile's estimated range. Recalculate with a launch altitude of 5,000 feet MSL. What happens if the target is heading toward you at 500kts?

This is a fairly complicated problem; these calculations will make several generalizations and assumptions in order to simplify the calculations. First, to simplify calculations, simply average these speeds and assume that the missile actually travels at a constant Mach 2.5. Second, assume the 35nm range applies to 20,000' MSL (17.5nm at sea level). Third, assume that missile range increases linearly with altitude increases. Fourth, since the speed of sound varies with altitude, use the speed of

sound at the median altitude for all calculations

The median altitude between the shooter (30,000 feet) and the target (10,000 feet) is 20,000 feet MSL. Bearing that in mind, begin with the specified 35nm range figure. Assuming an average speed of Mach 2.5, the missile takes roughly 82 seconds to travel 35nm. In the same time, the MiG-29 travels about 11.5nm. Subtracting 11.5 from 35, the missile's estimated range against this target is 23.5nm.

Now, let's recalculate with the launch altitude reduced to 5,000 feet. The median altitude is 7,500 feet. By dividing 7,500 by 20,000, the range should increase to about 37% above the range at sea level or roughly 24nm. At Mach 2.5, the missile takes roughly 56 seconds to travel this distance. In 56 seconds, the MiG-29 will fly

Escape

Maneuver

roughly 8nm. Subtracting 8 from 24, we estimate the missile's range at 16nm.

Finally, let's take a situation where the target is heading again toward you, only at altitude 30,000 feet. With the median range equaling 20,000 feet, start with the 35nm standard range. As calculated above, the missile takes roughly 81 seconds to cover this distance. Dur-

ing that time, the MiG-29 covers 11.5nm. Adding 11.5 to 35, we estimate the missile's head-on range as 46.5nm!

Range 100% 2q 75% -49 50% 9g 25% -20g Figure 2

KINEMATICS: THE KILLING GAME

So far, we've only examined half the equation. The examples above all assume one thing: the target is flying a consistent, straight course. What happens when the target starts maneuvering? If you said, "More math!" then give yourself a pat on the back. Rules of thumb vary, but generally engineers assume a missile will have to pull anywhere from three to four times the target's g-load. That is, if the target is executing a 9g evasive maneuver, the missile will have to pull 27 to 36g at some time during the flight to hit the target! Granted, this rule of thumb doesn't apply to all cases and doesn't consider that the missile is making guidance updates all the way to the target.

Missiles obey the same laws of physics that aircraft are bound to and, subsequently, use the same turn rate and turn radius equations. While the motor burns, the missile has plenty of energy for maneuvering. Like an aircraft, once the motor shuts down, the missile starts slowing down. The more it slows down, the less energy is available for maneuvering.

The e-pole, or "no escape" zone, is one measure used to estimate the missile's energy ability when it reaches the target. The epole measures what kind of escape maneuver the target must execute to escape the missile. Typically, the "escape maneuver" consists of a high-g turn away from the missile followed by a maximumacceleration run. The e-pole for a given missile might look something like Figure 2. In this hypothetical example, a target within 25% of the missile's range would have to execute a 20g turn, followed by a maximum speed run, in order to escape. For all practical purposes, the target aircraft cannot escape. At 50% of the range, however, the escape maneuver drops to 9g, and by 75% down to 4g. At the end of the missile's range, the target need only execute a 2g and extend in order to escape.

To cite a real-world example, unclassified reference sources often cite a 100+ nautical mile range for the AIM-120 Phoenix missile. By the time the missile flies 100nm, though, it won't have anywhere near enough energy to engage a high-g, fighter-sized target. It may not have a problem intercepting a lumbering bomber executing a 2g turn, but it won't have the energy to catch a MiG-29 pulling an 8g break.

THE OUEST FOR KNOWLEDGE

Even without hard numbers, the general concepts still provide useful tips. It is clearly advantageous, for example, to achieve the highest practical speed and altitude before firing. During a tail-chase scenario, get closer to the target before releasing the weapon.

Meanwhile, don't expect to find these diagrams at the local bookstore or in the manual of the next jet-era flight simulator. Combining launch altitude, target altitude, closure rate and target maneuvers generates a virtually infinite number of LAR diagrams. This kind of information will either be very highly classified or, at the very least, extremely difficult to obtain, making it unlikely to appear in a game manual or a \$30 coffee table book! M

WELCOME TO

WARPATH



an in-depth, stylized discussion on the art of war. Each month, two intrepid writers will choose a scenario from a recently released strategy or wargame and describe, in detail, their actions and reactions to the changing course of events. We therefore hope to supply you with valuable hints and tips on the game and to explain, from a commander's vantage point, why certain strategies and tactics may or may not work.

This month, Robert Mayer and Ed Dille have taken up arms and embarked on the road to war. To kick things off, they have chosen to replay the "Never too Late" scenario from Talonsoft's critically acclaimed Napoleon in Russia.

Briefing: In this scenario, the Poles of Napoleon's V Corps, led by General Poniatowski, are pitted against the 3rd Infantry Corps of the Russian 1st Army of the West and various supporting forces. These forces are contesting the village of Utitza and outlying environs that straddle the all-important road to Moscow. The Russian force consists mainly of the 1st Grenadier Division; in addition, a large Cossack force screens the Russian left which may be available to engage the French cavalry standing by. Though the French field

two full divisions plus supporting troops, the battle is far from one-sided. A horde of Russian militia is deployed to the rear of Utitza. Of greater significance, time is short and favors, with every passing turn, the Russians. The French have but ten turns to close with the enemy, take the village, and the surrounding countryside.

In this replay, Robert Mayer assumes the role of Poniatowski, leading the French V Corps, while Ed Dille commands the Russian 3rd Infantry Corps. What follows are their comments regarding the conflict.

FRENCH TURN 1

The V Corps consists largely of Poles, raised to support the Emperor's invasion of the Russian Empire. Consisting of the 16th and 18th divisions of infantry and three brigades of cavalry, our mission is to advance against the Russian army's left flank, to threaten and occupy their positions around the village of Utitza. Our primary goal is to seize the Utitza mound, a hill located behind the village. We must seize our objective with utmost haste, but there are many Russian troops barring our way, making the hill's capture rather unlikely. The much less ambitious goal of mauling these Russian units and seizing Utitza seems more feasible, so I draw up battle plans accordingly.

My skirmishers move forward, beyond the edge of the orchard but fail to locate the enemy. The 16th Division forms up in column on the orchard road, out of Russian view; the 18th will follow in its wake, several hundred yards to the rear. With luck, a solid mass of Polish troops will spill from the orchard to smash through any Russian positions blocking the road to Utitza. On the right, the cavalry trots toward Artemki. All is quiet.

The Russians appear! Two battalions have formed up in the line deployed in front of the town. Nearby artillery pieces have also been spotted. The cavalry reports that there are Cossacks ahead; my skirmishers have sighted Russian guns on the Utitza mound. There is distant gunfire, but contact with the enemy is quite tentative; nearby skirmishers continue to probe for weaknesses.



We hold our positions. French skirmishers have been identified, emerging from the tree line to our front. These are troubling times for the Empire. Napoleon and his indomitable army are penetrating into the very heart of Mother Russia.

All of the visible French units seem poised along the front. Nevertheless, I fear that our initial deployment has placed our left flank in dire straits. Napoleon's infantry, or worse, his cavalry, may decide to approach Utitza from the western road. Therefore, I immediately order our line to shift westward. This causes the redeployment of two battalions, guarding the woods to the north, back toward Utitza and shifts my western-most units toward where the road exits from the woods.

This maneuver and the reestablishment of our line will take time. To prevent the French from intervening, I have ordered an offensive to be launched against the center of the French line. My objectives are: to deny the French artillery an opportunity to occupy the elevated terrain in front of Utitza and to halt the French advance well before their main body can emerge from the woods and establish an effective line of battle. The 1st Battalion, 2nd Brigade of Lifeguard Grenadiers, under the command of General Tuchkov, will lead, charging up the hill. The 1st Battalion of the 3rd Grenadiers will anchor our newly repositioned left flank along the junction of the woods and the western road.

All other units along our center have advanced and begin to engage the French skirmish line with Fire and Melee attacks, which prove more costly to us than to the French, but our objectives, despite the heavy casualties, have been met.

To the rear, Pavlov's Grenadiers are escorting the supply train to Utitza's crossroads. I also order Position Battery #23 to abandon the Mound and move forward toward our front line. To the west, I issue orders to the one active unit of Cossacks to move forward and scout for any signs of the French cavalry.

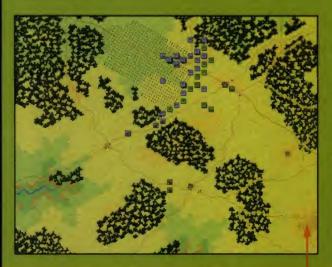


The 16th Division closes with the enemy. Our forces, in their columns, hope to smash the Russian line. Close behind are the men of the 18th Division; if the 16th can force a breach in the Russian lines, then the 18th can march into Utitzal The Russians bring up their grenadiers. On our right, our Uhlans rout some Cossack horsemen. A major engagement near Utitza seems imminent.

FRENCH TURN 3

Chaos! The Russian line before Utitza has now repulsed two charges by the 16th Division's 15th Line; dead lie everywhere.... There is cause for celebration, though. The 3rd Line has taken the hill on the Russian's right, mollifying any concern regarding our left flank. And our Uhlan lancers have overrun several militia units and seized a Russian battery to the southwest of the village.

Sadly, other events eclipse this magnificent charge. It now appears the Russians were merely regrouping. My cavalry, winded, is now vulnerable while the infantry of the 16th Division seems ineffective on this climactic day of battle. Worse still, the divisional artillery is unable to support their advance!



RESEARCH COME 2

An overwhelmingly superior force of over 1000 French cavalrymen charge our detachment of just 200 Cossacks and proceed to decimate the hapless horsemen. However, all is not lost. Buoyed by the successes attained earlier, I decide to order two battalions of Pavlov's Grenadiers west along the road to strengthen our left flank and to bolster our forces against the oncoming French cavalry. In addition, I order the 1st Battalion of the 3rd Grenadiers to Melee with a French infantry unit in an attempt to outflank it from the direction of the woods.

On the right flank, two battalions of the Lifeguard Brigade encountering a limbered French artillery unit, fall upon it. To prevent the artillery from escaping, I also order the 3rd Brigade of Tauride Grenadiers to move behind the beleaguered French unit. This, in effect, will also seal off the hill's rearward slopes. Finally, I order the light artillery battery #6, in the center of the line, to limber and withdraw to the high ground behind the western road. From this vantage point, the #6 battery will have sufficient range and an unobscured field of fire to cover the entire front while our #23 battery is being brought forward.



GLENIAL YORK Y

Though tactically successful, the Melee initiated by the 1st Battalion, 3rd Grenadiers has become a handicap. Hopelessly out of position, they can not block the French cavalry's advance up the western road. As Pavlov's Grenadiers are still out of position, this has proven to be a huge strategic mistake. The French cavalry, as I expected, have advanced up the Western road and, without waiting, immediately pounced upon the #6 light battery. Our barrage strength has now been reduced from 16 guns to a paltry four—and these, comprising battery #23, are still out of position, unable to support the line.

I am now compelled to reinforce the western approach to prevent further advance of the French cavalry. However, the French mounts have already slipped into our rear. I must send Pavlov's Grenadiers back to Utitza to guard my sole remaining artillery battery and the Supply Wagon. Their withdrawal will also deny the French cavalry any opportunity of capturing Utitza outright.

On the right flank, my strengthened forward positions continue to threaten the French artillery. I have also concentrated my offensive fire on the infantry supporting the French artillery. The infantry is eventually eliminated. I next conduct a successful Melee attack against the French artillery battery. My forces are now better able to attack a second French artillery battery which has moved up and is situated at the foot of the hill.

FRENCH TURN 4

Taking this opportunity I move more forces forward. Still, little progress can be expected unless their infantry shows signs of wavering. A curse on all patriots!

The 16th is still stuck on the orchard road; perhaps my decision to bring them up in column was in error.

PARTICULAR TRANSPORT

Because of my failure to secure the western approaches to Utitza, I must now reign in my left flank and reestablish a new defensive line. The right flank is anchored on the hotly contested hill to the north; from there, our line runs south-southwest, with every available unit facing toward the west. A prudent decision, this move permits the harried French units, till now trapped in the woods, to finally reemerge onto the open countryside. Still, I believe that this realignment will pay handsome dividends. I hope to send the Cossacks down the same road the French cavalry used so that they may attack the newly formed French rear.



FRENCH TURN 5

The 16th is beginning to engage the enemy, the arrival of fresh troops should make a difference. The Russians stand firm. There are so many of them, and they seem so indifferent to death! The 18th continues with great difficulty; again they fare poorly against the Russians deployed along the slopes before Utitza.



WOODLAN LLOW

A French assault on the center of the line is soundly repulsed. I order Pavlov's Grenadiers to counterattack the weakened French division. They succeed, causing the enemy to flee toward the woods. This attack unfortunately leaves a gap in the center of our line which somehow must be closed quickly.

Meanwhile, units on the left flank are bravely continuing their holding action. I order battery #23 to change its facing so as to support its countrymen against the renewed French cavalry attack. On the right flank, our troops continue to probe the French positions. We may be able to destroy the French artillery units and improve our chances of achieving victory. Where are my reinforcements?

FRENCH TURN 6

My troops can't make headway, and the 18th Division is advancing too slowly to be of real use. My cavalry, disrupted, is subjected to constant, long-range cannon fire, A Russian charge captures the 16th Division's train and its supplies. I will retake the wagons, but this diversion does little to improve things.

The Russians appear to be weakening. I will push the 16th Division harder, ever onward toward Utitza. I have given up hope of capturing the Mound; at this point, it is the town or nothing! The Russian's left flank seems vulnerable, I will concentrate my forces here, in the hopes that the 16th will eventually prevail.

BUSSIAN TURNS

Using the speed and maneuverability of their cavalry, the French have pinched our left flank. On our right, having shifted an infantry unit into the woods, they threaten envelopment. An excellent strategy ...if sufficient forces were available; the battered French can flank us only from the left. Time for fancy maneuvering.

I order the 3rd Battalion, 2nd Brigade of Lifeguard Grenadiers to withdraw to the edge of Utitza. Anchoring our hastily revised left flank, I ignore the enemy's inefffective maneuver on our right and wheel the entire line to the left. Once again, I threaten to turn the French left, upsetting even their artillery batteries. Our forces are nevertheless left, weakened. I am distressed at the thought of losing my last artillery unit and, far worse, Utitza. Where are my Reserves?

The French defensive fire is withering, severely weakening my lone unit harrying the French artillery. I managed to capture the French supply train on their left flank but was unsuccessful in disrupting either French artillery.

DESCRIPTION OF THE PARTY OF THE

We are about to lose Utitza, still we vow to make the French pay dearly for their prize. Grudgingly, we give ground, as they advance to engage us in a Melee.

Word reaches us that the Smolensk militia units, some 2,000 strong, have been finally released to us. Is salvation at hand? I depart for the front lines. Will their delayed commitment influence the course of battle. News spreads quickly; our forces mount a series of desperate but determined counterattacks to further weaken the French. It is now their turn to abandon the attack in favor of defense!

Even at this late juncture, I prevented my weaker units from meleeing with the French; my objective is to stall their envelopment long enough for our reserves to arrive. I firmly believe that they no longer have the resources nor the time to finish us, reconsolidate their lines and withstand the threat the reserves pose.

PRENCH TURN 7

The battle reaches its climax! While 16th Division soldiers regroup and the men of the 18th form up for an assault on the Russian front, the cavalry rushes in from the right! Brave horsemen sally forth, setting their sights on the town of Utitza. What? Not a single Russian defends the town! How can this be?

Elsewhere, the cost is high. The Russians reform and again counterattack, Their brutal attack causes many Poles to run from the field of battle. The Russians cannot stand against the *Grand Armée*, unless we, ourselves, falter! No use; madness is coursing through their ranks. The generals try to restrain their flight, and manage to rally some. The morning wears on, no end in sight.



position. Elsewhere, Melee attacks inflicted good but costly damage. If the reserves don't arrive soon, my position is lost. Worse: General Strogonov was felled in battle.



FRENCH TURN B

Grimly, a smattering of foot soldiers joins the horsemen to hold Utitza. The Russians are still too close for the cavalry to safely withdraw. Before the village, my infantry renews its drive to break through the stubborn Russian lines. Eventually, we seize the hill, but I doubt my forces are strong enough to hold it. My men are exhausted. My guns are ineffective, while the Russian's remain deadly. Fortuitously, there are no signs of the Russian cavalry. Still, more Russians arrive from beyond the village. Is there no end to this heinous horde?

WARRANT WARRANT OF

The units in the village crumble while the Cossacks continue to reshoe their mounts as their cavalrymen continue to die. Despite this, I order the 1st Battalion, 2nd Brigade of Lifeguard Grenadiers to move forward and Melee with the one remaining French supply wagon. They succeed in capturing the wagon while our troops hold their own elsewhere along the line. Time is running out. The Smolensk Militia units which I have ordered to be grouped into three formations, two of 800 men apiece and one consisting of 600 men, are of much lower quality than the French units. They are, however, fresh troops, eager to pick a fight with the embattled French.



FRENCH TURN 9

The Russians are dying in packs, but the road remains blocked; my cavalry is now cut off. I retain the high ground but fear this is temporary. My guns are low on shot and shell...fresh Russian troops are approaching. Repeated infantry assaults have destroyed the battery that caused us so much grief. Still, our hold on Utitza is tenuous. I cannot hold out much longer. Forgive me, my Emperor!

Suddenly, pouring forth like a green tidal wave, Russian troops swamp the forces holding Utitza; few escape. The town and its surrounding hills are heaped with Russian and Polish dead, and the field of battle is theirs! We will regroup and try again—make them pay for their insolence!



RUSSIAN LESSONS LEARNED

"The best defense is a good offense." This dictum holds some truth due primarily to the timely arrival of the Utitza Mound reserves. When their entry remained questionable (both the Cossacks and the Smolensk Militia had only a 20% chance of activation each turn), less gallant action might have been recommended. The bottom line: I gambled and was uncharacteristically rewarded. The French fought well and came very near to winning outright.

FRENCH LESSONS LEARNED

The battle ends with a minor French defeat; congratulations to the Russian commander. If truth be known, the French commander's task is indeed daunting; time is short and the Russian Grenadiers are fine soldiers. It might have been better to attack on a broad front, rather than to launch periodic stabs at the enemy. The Polish cavalry was magnificent—that is, until it was cut off behind the enemy lines and slaughtered. It would have made more sense to have swung them farther off to the right, then envelop the Russian flanks en masse; my piecemeal commitment of these noble horsemen cost me dearly.

SECRETARIA MARKET NO

I order the hastily arriving Militia units to mop up the remaining French forces, even though it poses no harm to Utitza. By preventing the French from retreating, we believe that Napoleon will have to rethink his ambitious plans.

We lost 5,525 troops, 16 guns and 7 leaders, while the French lost 4,525 troops, 11 guns, 3 leaders and most importantly, the field of battle.



FRENCH TURN 10

We have lost the field. We failed to retake the village, much less the mound of Utitza A final, futile counterattack kills more poor Polish troops, while hardly discomfiting the Russian horde. It was an error to concentrate my forces on such a restricted front. It would have been more prudent to dispatch the cavalry to destroy the Cossacks, seize the villages off to our right and await the 18th Division as it formed up alongside the 16th to make a broad frontal assault.

The Russians have suffered and seem in no shape to pursue us, while our forces are far from vanquished. We shall regroup, and try again. Vive la Révolution!

MARINA TIME S

Despite the Cossacks' absence, the Smolensk Militia has risen to the occasion and the French have relinquished Utitza. We control the center of town, weakening most of the remaining French infantry. The only hope for the French are their cavalry. My Melee attack on the French artillery has severely battered the unit but still refuses to yield. Perhaps I can take it next turn.

The Ghosts and the Darkness

A Strategy Guide for Shadow Warrior

by Allen Rausch

o Wang must destroy! Lo Wang must mutilate! Lo Wang must kill! Lo Wang must have... a sense of humor?!?!?

If you've downloaded the shareware version of GT Interactive's first person shooter, Shadow Warrior, you can appreciate the above statement. The game has buckets of blood, the standard weird zombies and monsters, and all the action that the aging Duke Nukem engine can provide. What sets the game apart, though, is beginning players would do well to start out using just the keyboard. The keyboard offers greater control, and in Shadow Warrior, it offers access to the all-important '.' (period) key.

The period key will hold Lo Wang in place while the direction keys spin him around. This is especially valuable in multiplayer gaming, where you may not see where the shots are coming from. A few quick spins in place while firing the Uzi may just give you the few seconds you need to turn the tables.

Never underestimate the power of

your sword (available by pressing the '1' key; many players don't realize they have it). Even though you've got to get right in an enemy's face to use it, the sword will kill many lower level enemies like the zombies and the coolie-hatted monsters in one blow. This will help you save ammunition for the really tough bad guys you'll face later on.

Caltrops can be useful in one-to-one multiplay, but only if you listen very carefully. Leave a few around in

one location — when you hear an opponent yell, quickly rush to where you left the caltrops. If you're playing with more than

one opponent, caltrops aren't much use, and you're just as likely to run into them as your opponent.

For sheer laughs, it's tough to beat the sticky bombs. These bombs will stick to anyone or anything and blow up a few seconds later. Try using them in rooms with a lot of creatures — the shrapnel should take out a few. If you get hit with one in multiplay, just run straight at your foe. You won't survive, but maybe you can take him with you.

Your most important weapons, though, are the flash bombs and the inviso-grenades. Although they come in handy in single-player games, allowing you to blind and confuse the monsters, the flash bombs really come into their own in multiplay. A human player hit by a flash bomb has his screen turn pure white, allowing you to kill him at your leisure. If you find yourself hit with a flash bomb, do a quick spin around with the period key while firing your weapon. Then move back and forth at random while you wait for the screen to clear. It doesn't always work, but it might stop the enemy from drawing a bead on you.

As for the inviso-grenades — well, you can see them and they can't see you. Who could ask for anything more?

Remember to always play with the



its sense of humor, which shows that the designers weren't taking themselves or their subject too seriously. This comes through in the game's selection of oddball weaponry and affectionate digs at Hong Kong-style action movies made famous by John Woo, Ringo Lam, Tsui Hark and Jackie Chan.

That said, the game still harbors some intense action. This strategy guide will help you get through the first level of the shareware game and give you a few tips that will serve you well against the computer or other human chop-socky fans.

LEARN WELL, GRASSHOPPER (GENERAL TIPS)

As with most first person shooters, the choice of controls is up to the player. Although many players use a combination of mouse and keyboard control, most





vending or pachinko machines. They'll always give you stuff!

Those people with the disc version of



game can look for a hidden .AVI (Video for Windows) file that will give a "virtual reality" walk-through on all four levels of the shareware version.

NOW WE RIP MR. WOO! (LEVEL 1 WALK-THROUGH)

You start Level 1 inside of Wang's training studio. Be sure to nail the two zombies



who come through the window as the level begins. then look around. You'll notice a practice dummy, a brass gong and a short wooden post. Hitting the gong with a shuriken will open up a panel that contains a nuclear weapon. If you've already taken damage, kneel down and punch the post - your health will slowly return to normal. This will not work if you damage the practice dummy, though, so leave it alone. The target post is a

great help when you can't find any health packs.

Proceed out the window, pick up the

poison qas canister behind the crashed bus and go around the corner until you find the map room (it's right above the alleyway with the crates). The switch to open the map is behind the desk in this room. Pick up the med pack.

When you leave this room and jump onto one of the crates, look for a small ledge running along one wall. Run across the ledge and jump across toward the window on

the other side. The window leads to a secret red room full of goodies (and an amusing joke about graffiti in Singapore), including a grenade gun. After you get the gold key from the crates you'll be ready to take on the second portion of the level.

The gold key opens the door to the train station across from the two crashed

> cars. Shoot the poison gas through the window in the door and give it a few moments to do its work. Once you get past this door, you'll be in a room with a baggage carousel. Crawl through the grates in this room until you find the slot cars. Activate them with the space bar. Drive the yellow car over to the far left side of the room. The silver key is on top of the yellow car - if you handle the slot cars wrong, you won't be able

to finish this level.

Avoid the piranha pool. There's some armor and ammo in it, but not enough to make up for the body parts you'll lose when the fish start biting.

Examine all of the lockers in the area just after the piranha pool. Any lockers that are a bit lighter than the others can be opened. One contains a fortune cookie that restores all of your health; another opens up a wall-space with a monster in a coolie hat inside. Kill this monster and you'll find blue 100% armor. This is a good place to use your inviso-grenade, by the way, but be careful! The monsters in the big coolie hats can see you while you're invisible! In addition, you have to kill the monsters twice. When they die a ghost rises from the corpse and will follow you around forever.

Go into the pachinko parlor and try all of the machines — they'll give you a few minor goodies. The most important thing in the pachinko room is the silver key, which should be where you dropped it off - with the remote-control car. The silver key opens the door behind the two metal detectors. Also in the pachinko parlor is an ATM machine which gives you a fortune

Once you've gotten past the door that opens with the silver key, be careful! There's an invisible enemy on the train platform. You'll be able to see him briefly when you fire your gun, but your best bet is to fire off a couple of nuclear or rocket rounds. Be sure to avoid the train when you walk down the train tracks (but you knew that was coming, didn't you?).

When you reach the second platform area, fire off your rocket launcher four times toward the back wall. This should take care of any enemies in the area, as well as open up another secret room. Finally, enter the crashed train. There are two more coolie-hatted monsters inside, so if you jump in and out of the train quickly, they should follow you out and be easy targets. Go inside the train, look for the enormous yin/yang symbol, rush to it and use the space bar to end the level.

Whew! What a trip! And this is only the first level of the four available with the shareware version of the game. Later on you'll face stronger monsters, gain new weapons and even drive vehicles. But if you still need help getting through the level, try this code - swgimme. That will grant you every weapon, all the keys, full health and armor.

Of course, that would be wimping out. And Lo Wang does ugly things to wimps....

Creature Comforts

Build a Treasure

room first.

Dungeon Keeper Strategies

A TUTORIAL COMPANION

Although *Dungeon Keeper* is complicated, it is well documented. The first five games are tutorials designed to help a beginner learn how to build dungeons and defeat an enemy. Herewith — a quick-and-dirty companion to those tutorials.

SMITING EVERSMILE

After the brief introduction, click on the red

flag to begin the first tutorial. This dungeon is named Eversmile. Change the resolution of the screen by pressing the keys <Alt> and <r>. Go to the options menu select the flashing bag of gold, which is the Treasure room icon. Selecting the icon transforms the cursor into a small bag of gold. Use it to instruct the imps on how to construct Treasure room squares on each of the nine tiles in the empty tiled room. A square can be placed when it is outlined in

green.

Congratulations for completing the task. Now it is time to

excavate the gold from the area to the east. Right click in order to transform the bag-of-gold cursor into a pickaxe. Next, select each of the nine gold vein squares;

these instruct your imps on the excavation of the gold and its storage in the Treasure room. Note that most rooms need to have at least nine tiles in *Dungeon Keeper*.

For a close-up view, go to the book icon (Research Panel) and select the Possess Creature Spell. The cursor should change to the Possess icon. Click it on

one of the working imps. The dungeon view will change to a first-person view.

You will see what the imp sees. Use the mouse to

by Andy Backer

look up and down and the arrow keys to move. To disengage, right click and the original dungeon view will be restored. When the gold has been excavated and the new room tiled, the tutorial will congratulate you and ask you to select the Rooms Panel (flashing) and then the Lair icon (a flashing egg in a nest). Then you should place Lair squares in the new room.

After you've finished, the tutorial will instruct you to dig a passageway to the Portal (a flashing square to the north of the Dungeon Heart). New creatures will enter the Lair via the Portal. First, a Fly and then a Beetle will enter and lay eggs. To feed the Beetles, excavate a 3 x 3 room and connect it to your Lair. Go to the flashing Rooms Panel and select the Hatchery icon (a flashing egg). Place Hatchery squares in the new room and soon you will have a room full of chickens for the Beetles to eat

A Lair with eggs and the Treasure room in the background.

when they are hungry.

To create additional imps, go to the flashing Research Panel and select the Create Imp icon. Click your cursor in a tiled



(click on the Q icon above the miniature map) and save the game at this point. The tutorial is short and takes you step by step in building the basic rooms of a dungeon. Saving the tutorial at this point allows you to easily repeat it. Note that below the miniature map is a number indicating the amount of gold you have on hand. Below the number is a panel of icons. Clicking the icons brings up Information, Rooms, Research, Workshop and Creature Panels.

All games begin in the room with the Dungeon Heart. It's a room with steps on all four sides that go up to a pulsing gem. All games begin with this room completed and a few imps scampering around waiting for instructions. Eversmile also has a room ready for further construction. The imps, who have tiled the floor, claim it. Go to the Rooms panel; it's next to the question mark icon and it's flashing. Click on it, then





room to create an imp. Three additional

imps will help speed up the reinforcement

of the dungeon walls. Reinforcing is nor-

mally a safeguard to prevent the enemy

from tunneling in to your dungeon, but

because a new room (filled with water)

was discovered while your imps were exca-

vating the gold, your dungeon is still vul-

nerable to attack. The Tutorial will warn

when an enemy party is approaching. You

can follow its progress by clicking on the

flashing scroll icon above the miniature

map. You will see a group of white dots

moving around your dungeon walls, which

will prevent the enemy from immediately

entering by your reinforced walls. Howev-

er, when they reach your Lair, there will be

no walls at the water line, and they will

invade your dungeon. Before the enemy

reaches the Lair, go to the Creatures Panel

and select your eight fighters (not imps). Click eight times on the numbers to auto-

matically place creatures in your hand of

evil. Right click over the Lair to drop your

forces one at a time. They will shortly

troops again and drop them on the second

party of invading enemy forces. Finally,

the enemy Warlord will come. Use the

After the first battle, gather up your

defeat the enemy.

same technique to destroy him and win the game. The tutorial will advise you to press the spacebar to go to the next tutorial.

CONQUERING COSYTON

You are now expected to know how to build a basic dungeon with a Treasure room, Lair and Hatchery. Make each of them 3

x 3 After build
You will off Hatcheries to The Bridge A Training room increases creatures'

levels.

A bloody battle

at the Bridge.

Hatchery. Make each of them 3 x 3. After building the Treasure room,

excavate gold veins and use those empty rooms for two separate Lairs and a Hatchery, if possible. (Remember that the Hatchery must be near and connected to both Lairs.) Then dig a tunnel to the Portal. Use the Research panel to create a few more imps. The tutorial will flash the Rooms icon when it's time to build a Training room. Make the Training room fairly large, at least 5 x 5. Connect it to your Hatchery.

Demon Spawn creatures are attracted to a Training room. Go to the Creatures panel to pick up your idle creatures (except your imps) then drop them in the Training room until the enemy attacks. Use the same techniques to conquer the enemy as you did in Eversmile.

WHIPPING WATERDREAM WARM

The tutorial teaches you how to build a Library in Waterdream Warm. Warlocks are attracted to the Library because they like to research spells. Make the Library 5 x 5 in

size. Build all the other rooms first, including a large Treasure room. Build a tunnel to the Portal, and remember your creatures have to have easy access

to their Lairs, the Hatchery and the Training room. Train the creatures and get

ready for another invasion. The research goes faster if there is more than one Warlock in the Library.

After you have constructed the same rooms as you did in Waterdream, a Bridge and Workshop icon appear on the Rooms menu. A proper Workshop (5 x 5) attracts Trolls and is used to manufacture doors and traps. In order to have the game automatically place the doors and traps, go to the

options menu and select Aggressive or Defensive Computer Assistance. Activate the computer assistant by selecting the C icon on the miniature map. Be careful in using Computer Assistance. The Computer has a nasty habit of not connecting a Hatchery to the Lairs and Training room. You will often have to build additional Hatcheries to correct the problem.

The Bridge is used to cross Lava or

Water. Delay building a bridge over the lake to the North until you've trained your troops and are ready for battle. Be sure to train all your

Warlocks; it's their fireballs that will knock down the wooden doors in the north and destroy the enemy's Dungeon Heart. Use the spell Call to Arms near the enemy doors and Dungeon Heart, then gather your creatures and drop them on claimed squares near the action. When the enemy has been defeated, drop imps to claim the enemy rooms, including the room with the destroyed Dungeon Heart to end the tutorial.

LASHING LUSHMEADOW-ON-DOWN

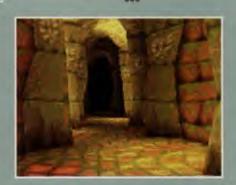
The fifth tutorial introduces the Guard Post and a new monster, the Bile Demon, one of the most powerful creatures in the game. The minimum size of a Bile Demon Lair is 25 tiles for each Demon. A connecting Hatchery has to also have at least 25 tiles.

Each Guard Post houses one creature. It will stay at the post until it's hungry or sees any enemy heroes. By now, the Prison will

also appear on the Rooms menu. Dead prisoners become undead skeletons when imprisoned, adding to your forces. You must select

the option to capture and imprison the enemy, however. That is done by selecting the Information icon and then the imprison option. The enemy's Dungeon Heart must be destroyed in this tutorial also to end the game.





Fireballs — Fast & Furious

A Strategy Guide for Magic: The Gathering — Battlemage

by Allen Rausch



he call of the Mox Beacon was irresistible. I had entered the incredible world of Corondor at the behest of the Battlemage Ravidel. Here he hoped I would fight against the mightiest wizards in creation until we had all weakened one another enough for him to destroy us one by one. Ravidel underestimated me, though.

As the screaming form of the Battlemage tumbled into the Earth, I pondered the combination of agility and tactics that had brought me victory. That is why I penned this scroll. Other Planeswalkers seeking guidance in the ways of spell-

casting would be wise to gaze within, as the tactics described could well mean the difference between victory and a crushing defeat.

GENERAL TIPS:

SPEED KILLS....

One of the frustrating aspects of *Battlemage* for new players is the sheer speed of the computer. The computer isn't working under the same speed restrictions you are (translation: it cheats), so it can whip out spells a lot faster than you can. Experiment with various cards and card combinations to figure out which ones you can get out the fastest. Often it isn't the strongest card that wins the Duel so much as the one that gets out first.

Start by constructing simple decks and be sure to load them in for both you and your opposing wizard. Try loading the "All Lands" deck for the enemy wizard. This deck consists of all land cards and will

give you time to try out various spells to see how they work on the battlefield.

THE TIME THING....

The best way to win at *Battlemage* is to get used to its unusual timing system. Wizards

can only cast one spell at a time, so when you play a card, its graphics effects must finish before you can play a new card. The only exception to this is the land cards that add mana to your pool. These take effect instantly.

Use your time wisely while you're waiting for a spell to finish. This is when you can shuffle your cards around so that the next card you want to use will be ready when the current one is finished. You can also use this time to press the W key. This toggles between you and the other wizard. Most of the important action takes place in the area right around the Planeswalkers.

protect you from the computer's creatures. At best, you should leave one weak flyer (Mesa Pegasus is good) and one weak walker (try the Benalish Hero) between you and the enemy to block creatures. They may die quickly, but they may delay the enemy just long enough for you to win. Remember that the object is to kill the enemy wizard, not his creatures.

THE CARDS

THIS LAND IS MY LAND

Always play land cards the instant you see them in your hand! If you're about



THE BEST DEFENSE....

The name of the game in *Battlemage* is attack, attack, attack! Again, the speed advantage of the computer will crush a human player. There are no elaborate defense measures you can take that will

to play a spell card and there's a land card in your hand, take the extra second to cast the land first. Not only is the best place for mana in your pool, those land cards take up valuable space in your hand. You get a new card every 20 sec-







onds or so. If you have seven cards in your hand, you'll lose one (possibly a good one) in favor of the new card.

PICK A CARD, ANY CARD

Building your deck is extremely important in *Battlemage*. When constructing a deck (or Tome, as the game calls them), remember that speed is the key. Look at the casting cost of the card. As a general rule, if the casting cost includes colorless mana, you're going to waste valuable time on the battlefield clicking the mana symbols. Colored mana, on the other hand, is automatically deducted and cast. This makes a card such as Savannah Lions (cost: 1 white) a better choice than a Pearled Unicorn (cost: 1 white, 2 colorless), even though the Pearled Unicorn is a much stronger unit.

The only exception to the speed rule is direct damage cards such as Fireball. In this case, the extra time taken to pump up these cards is offset by the massive amount of damage that the card can do. Cards that do more damage when you put extra mana into them are worthwhile additions to any deck.

THESE ARE NOT YOUR FATHER'S MAGIC CARDS....

Another reason to experiment with the cards is that players who are familiar with the original card game are in for a few surprises. The best idea for old *Magic* players is to forget about the original game and deal with the game on its own terms.

As an example, the original Fireball card is a direct damage spell and can't be blocked. A Battlemage Fireball must streak across the battlefield and can be blocked by a well-timed Circle of Protection: Red.

Another example: the Lord of the Pit requires the sacrifice of a creature of your choice during every turn's upkeep. Battlemage's Lord of the Pit eats one of your creatures every 20 seconds at random — if it doesn't, it'll damage you. When deciding whether or not to use this card you need to examine the rest of your deck to make sure you have plenty of cheap, quick casting creatures. Otherwise the massive damage the Lord can do to the enemy isn't worth the damage he'll do to you.

Check out some of the default Tomes that come with the game. Most are pretty good examples of deck construction. Examining and testing these will give you an idea which of the cards are valuable and which are worthless. (Note: **NEVER** use the Helm of Chatzuk. It's supposed to give any creature banding. There is no

banding in the game, though, which makes this card a colossal waste of space.)

THE CAMPAIGN

CARDS ARE POWER....

When you attack a neutral territory, you may or may not have an encounter with one of its denizens. If you do not have an encounter, the territory may elect to join you of its own free will. The more spells you have in your hand, the greater the chance that the territory will elect to join you. People tend to side with power.

Concentrate on neutral territories first, and avoid attacking the other wizards until you have at least 40 cards in your Trove. Take as many cards as possible with you when you go into combat, making sure that all of them support one another. Don't take a green card into battle if you've only got one forest card to support it. The odds of getting to use it are extremely slim.

Be sure to adjust your Tome before going into combat with one of the PC wizards. Examining their default Tome in the deck building area will help here. Since each wizard has a preferred color, adjusting your Tome to have cards of the opposite color will help you defeat them.

MONEY DOESN'T MAKE THE WORLD GO 'ROUND....

Although the instructions tell you to be careful with your Taels (money), you can safely ignore this. It is true that certain dialogue options in territory encounters require you to have a certain amount of Taels in your possession in order to see them. These options, though, are pretty few and far between. The only notable exception is the Quirion territory. The Exarch will demand money for the territory. If you have 500 Taels, you can get some great cards as well as the territory.

THE TRUTH IS THERE

READ CAREFULLY! There are many possible resolutions to territory encounters. Some may net you Taels or cards, but there's always one "ideal" outcome that will get you the most stuff (including control of the territory). Clues to this can be found in the descriptions of the territory and in the wizard's character descriptions. For example, the description of the territory for Stonehaven Plains says that "its resident ghost inspires sympathy rather than terror." This is a clue that the encounter with the ghost of Jared Carthalion's mother can be resolved by picking the most sympathetic dialogue.



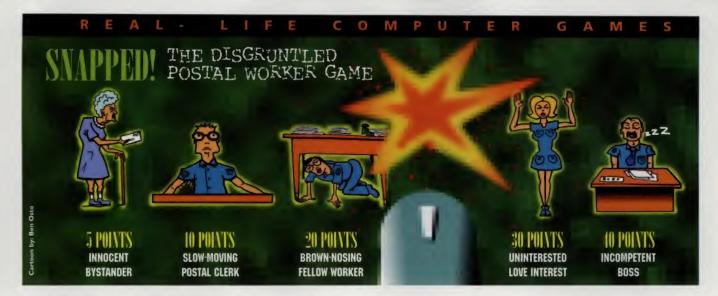


Keep in mind that when playing as different wizards, you may have territorial encounters that seem the same, with similar dialogue choices. However, making the same dialogue choices can produce wildly different outcomes! Tevesh Szat is a ruthless killer; in one encounter he has the choice of torturing a sentient tree in order to get a Lure card. If he makes that choice, he gets the card. Kristina of the Woods, on



the other hand, is a Defender of life. The exact same encounter contains the exact same words, but if she chooses the "torture option," she will actually lose spells! Remember the character you are playing with!

A little time and patience will drastically improve your spell-casting skills — and improve you must...lest the Battlemage rise again!



NEXT ISSUE

FEATURE STORIES

HOLLYWOOD GOES GAMING — You've heard how movies and TV have been stealing pages from the gaming industry. Read how developers and publishers return the favor by turning popular features and shows like *The Lost World, The X-Files, Men in Black, Blade Runner* and *The Simpsons* into the latest games! Follow writer Karen Jones as she boldly risks the MiB's Neuralizer to bring back the latest scoop on media crossover.



ONLINE GAMING — CGE contributor Ed Dille seeks out the world of multiplayer, where you can go head-to-head with real live gamers! He checks out the hottest online gaming sites and reports back on who's got what and how it all works.

THE ZORK CHRONICLES — Longtime Zork fan Allen Rausch pens a tribute to the long-running, multi-episodic game franchise. From its humble beginnings as a text-based adventure (see this month's CD-ROM for the original Zork game) to its latest dazzling 3D incarnation Zork Grand Inquisitor, Allen kicks down the door, slays the bad guys and gets prizes in the Great Underground Kingdom!

STARSHIP TITANIC — Douglas Adams, creator of the classic *The Hitchhiker's Guide to the Galaxy*, creates a strange new world aboard a starship that crashes — into your living room! Allen Rausch explains the player's predicament while cleaning up the incredible mess it left in *his* apartment....

PREVIEWS, REVIEWS & MORE!

PREVIEWS & REVIEWS: Check out the hottest titles to come, and the latest games to hit shrinkwrap! We'll be giving you sneak peeks of, among other things, Fox Interactive's The X-Files: Unrestricted Access, Microsoft's Close Combat II, and SSI's Steel Panzers III. You'll also get the straight scoop on games coming out in time for the holiday, including Shadow Warrior, Starfleet Academy, Dark Colony, Byzantine: The Betrayal, Fallout, EF2000, iF-22, The Wild Ride!, X-Com: Apocalypse, Constructor and Total Annihilation.

AND MORE OF OUR USUAL GREAT STUFF: If that wasn't enough, you'll find out how to ace *Twinsen's Odyssey* and *Total Annihilation*, as well as more on kicking theirs in *Dungeon Keeper*. There're also our regular Hints & Tips features *Firepower* and *Warpath*, and the word on the gaming industry from our regular columnists — including Karen Jones, whose new column, "Media Bytes," gives a sharper definition to the meaning of "ouch."

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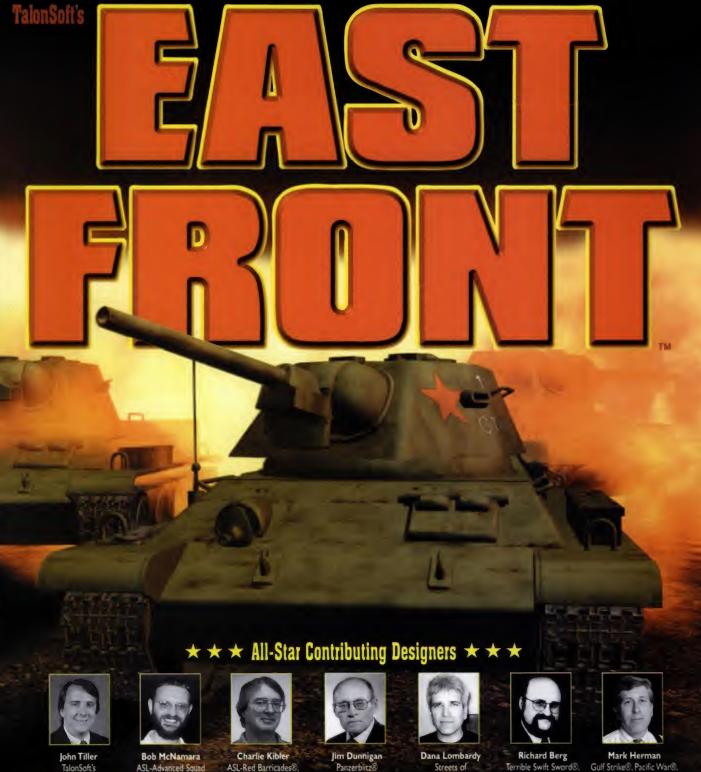


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